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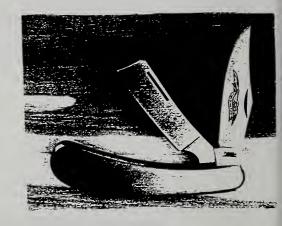
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YOCON YOHIMBINE HCI

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-car-boxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence. 1,3,4 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.3

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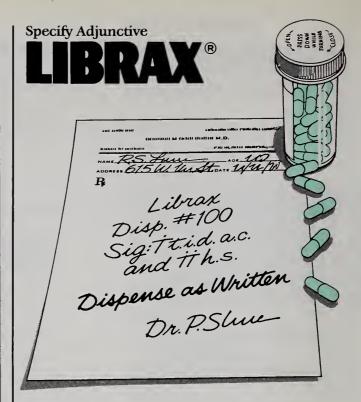
- 1. A Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
- 2. Goodman, Gilman The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
- 3. Weekly Urological Clinical letter, 27:2, July 4,
- A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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colon, mucous colitis) and acute enterocolitis.
Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br. Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete

mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.

As with all anticholinergies, inhibition of lactation may occur. Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug. Adverse Reactions: No side effects or manifestations not seen with either compound along reported with Libray. When chlordiazenovide HClis used alone. pound alone reported with Librax. When chlordiazepoxide HCl is used alone drowsiness, ataxia, confusion may occur, especially in elderly and debilitated; avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests addicable during protected the symptomic of the control of the advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesi-

to anticholine jet agents, i.e., tryfites of inloudin, full ring of vision, in mary less-tancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets. Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlor-diazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at the grantic length for several months. Above and deafter taking continuously at the rapeutic levels for several months. After extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervis addiction-prone individuals because of predisposition to habituation and



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"Can I see another's woe

And not be in sorrow too?

Can I see another's grief

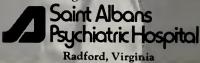
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- A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
- Goodman, Gilman The Pharmacological basis of Therapeutics 6th ed., p. 176-188.
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- 3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
- **4.** A. Morales et al., The Journal of Urology 128: 45-47, 1982.

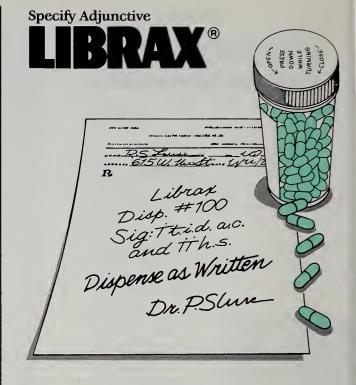
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Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br. Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (e.g. operating machinery drivino)

mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.

As with all anticholinergics, inhibition of lactation may occur. Withdrawal symptoms of the barbiturate type have occurred after discontinuation

of benzodiazepines (see Drug Abuse and Dependence). Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug. Adverse Reactions: No side effects or manifestations not seem with either compound alone reported with Librax. When chlordiazepoxide HCI is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated; avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCI, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy

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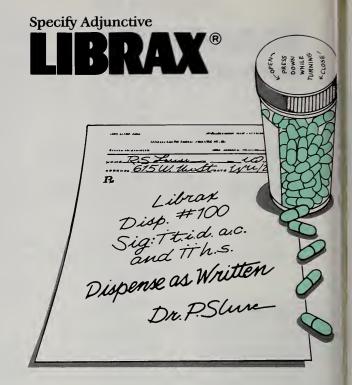
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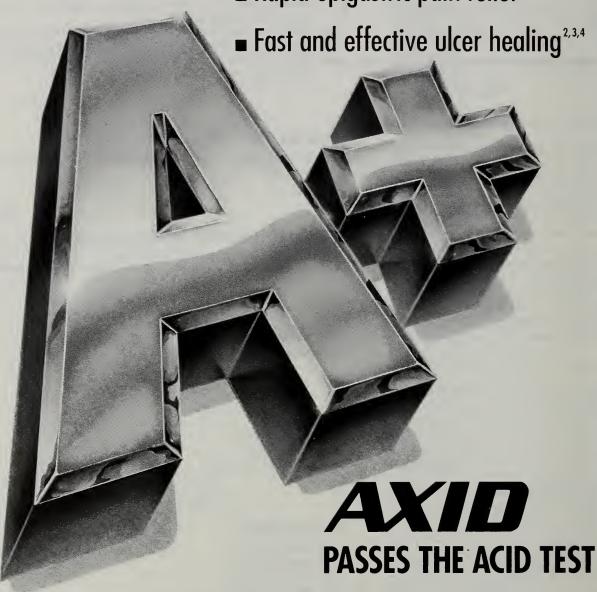
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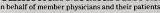
That's why the AMA has launched a proposal to improve access to affordable, quality health care. It's called Health Access America. The message is being sent to Congress, the media, labor and management organizations, concerned groups like AARP, and your fellow physicians.

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status. It calls for expanded publicly-funded health care for the needy; a stronger Medicare system; employer-provided coverage for all workers and their families with tax incentives for small businesses.

America's physicians are leading the way to reforming the health care system by speaking out on these critical issues. To get a copy of the Health Access America proposal, please call our Member Service Center at 1-800-AMA-3211.

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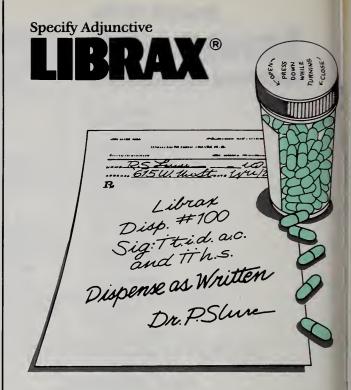


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"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br. Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete

mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.

As with all anticholinergics, inhibition of lactation may occur.
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- 1. A Morales et al., New England Journal of Medi-
- cine: 1221. November 12, 1981.

 2. Goodman, Gilman The Pharmacological basis of Therapeutics 6th ed., p. 176-188.

 McMillan December Rev. 1/85.
- 3. Weekly Urological Clinical letter, 27:2, July 4,
- 4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

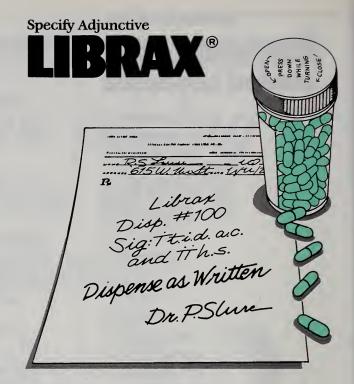
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Environmental Noise and Fetal Hearing

FLOYD E. THURSTON, M.D. and STANLEY L. ROBERTS, PA-C, M.P.H.

Introduction

Most practicing physicians know that some degree of hearing loss is not an uncommon finding during routine physical examinations of adult Americans. There may be as many as 1.7 million U.S. workers in their 50s with significant noise-induced hearing loss, and one popular periodical recently reported that there may be as many as 10 million people throughout the United States with hearing impairment that can be attributed to environmental noise.

See editorial comment in this issue.

Physicians are often asked to offer opinions concerning potential risks to employees from various workplace hazards, including chemicals, heat, and noise. The question about hazardous noise may not be posed as often as that concerning other hazards, because employees may consider loud sound to be a nuisance rather than a danger. With increasing attention being given to noise "pollution" by special interest groups and the media, however, and safe work practices being promoted by the Occupational Safety and Health Administration (OSHA), employees' concerns about the possibility of damage to hearing could become more common in the near future.

Reprint requests to Martin Marietta Energy Systems, Y-12 Occupational Health Services, PO Box 2009, Oak Ridge, TN 37831 (Dr. Thurston).

In conjunction with this heightened awareness, concern about the possible effects of noise on fetal hearing development may cause pregnant women to question their physicians specifically about this. It could become a frequent question, because almost 45% of the American work force are now women,³ up from 40% in 1976,⁴ and half of those in the 18- to 44-year-old group gave birth during the past year.⁵

The pertinent question is, "How much evidence is there for noise-induced damage to fetal hearing?" About 80% of workers in the United States are treated for occupational illnesses and injuries by primary care physicians instead of by specialists in occupational medicine. This brief review will attempt to summarize some of the research findings from the medical literature to help those physicians address this concern.

Types of Hearing Loss

Hearing loss can basically be divided into conductive and sensorineural types. Some congenital abnormalities, as well as those acquired from damage to the outer or middle ear by infection or trauma, can lead to conductive hearing loss. This type of loss may be correctable by medical or surgical intervention, and even some inner ear damage is correctable using microsurgical techniques. Sensorineural abnormalities are not readily amenable to intervention, however, because the auditory nerve and cochlea may both be involved.

Occupational noise exposure in many work situa-

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tions is regulated under OSHA regulations, which are published in the *Federal Register*; the regulations are then collectively published in the annually updated *Code of Federal Regulations*, 29 CFR 1910.95. These regulations require the employer to provide a hearing conservation program if an employee works in an area where ". . . noise exposures equal or exceed an eight-hour time-weighted average sound level (TWA) of 85 decibels measured on the A scale. . . ."⁷

Noise measurement, or sound pressure level, is reported in decibels, and is logarithmic; for example, the time permitted by OSHA regulations for workers' exposure to noise of 90 dB is eight hours per day, but to noise of 105 dB is just one hour. Different decibel scales are used to measure sound, depending upon what the sound is, and how it is measured; scales termed A, B, and C are in use, but in most medical and biological applications the A scale (dB A) is used. The various scales, or weights, help adjust the sound pressure level reading toward an estimate of loudness as perceived by the human ear. A technical description of the scales and the conversion factors between them is beyond the scope of this paper, but can be found in audiology textbooks and the OSHA regulations.

Heredity plays a role in some hearing deficits, and preventive measures in such instances are fairly limited. Noise, plus other factors such as rubella and other viral infections during pregnancy, can, however, contribute to hearing loss that is discovered later in childhood. Also, lifesaving drugs such as kanamycin and streptomycin can cause sensorineural hearing loss by damaging the auditory nerve and cochlear structures. Like hypothyroidism and hyperbilirubinemia, perinatal hypoxia has been recognized as a risk factor for hearing loss in newborns. 10

Animal Studies in Hearing Development and Damage

Loud noise in both the work and home environment contributes to hearing loss by damaging the hair cells in the cochlea. The damage initially occurs to the hair cells in the base of the cochlea, where high-frequency hearing predominates, and then extends to other areas in the cochlea. The destruction of outer hair cells before damage to inner ones has been demonstrated in guinea pigs exposed to loud environmental noise, and hair cell damage has been found to be more severe in younger than in older guinea pigs. 12,13

Although hair cell loss is generally considered irreversible, an experiment using radioactively labeled thymidine in young chicks¹⁴ has shown potential regeneration of hair cells destroyed by noise, strengthening the hypothesis that regeneration of damaged hair cells may be possible in avian species. Likewise, these researchers' similar work with adult quail suggests a potential for regeneration of hair cells after noise-induced destruction in these birds also. Due to species variability, none of the animal studies is directly applicable to humans, but they can serve as impetus for further research into this question.

There are species, as well as age differences, 13 in the effects of noise on hearing, but the findings in laboratory animal experiments have not been consistent with regard to the extent of the effects. Two Polish researchers investigated hearing changes in young guinea pigs whose mothers were exposed to 100 dB noise while pregnant, and found some degree of hearing loss. 15 In another phase of this study, they noted that 46 of 156 guinea pigs were born dead, due to low birth weight and prematurity, a finding that might appear more ominous than the reported hearing changes but does not appear to be applicable to humans. Finnish researchers studied 1,166 women who experienced environmental noise exposure during pregnancy; they concluded that such noise exposure is not a significant risk for either prematurity or low birth weight in humans. 16

Another experiment using auditory brain stemevoked response audiometry gave inconclusive results about whether exogenous noise affects intrauterine hearing in guinea pigs.¹⁷ In their experiment, the researchers exposed pregnant guinea pigs to 115 dB(A) noise for a variable number of hours during the last trimester of their pregnancies. They thought that they could detect some detrimental effect on the pups' hearing at one to five months after birth, but admitted that the data were inconclusive. Part of the difficulty in interpreting such data stems from inadequate information about attenuation of sound by the maternal abdominal structure of animals.¹⁷

Human Studies

In contrast to the paucity of information concerning noise attenuation in animals, there is considerable knowledge about the attenuation of sound by the human body. A study done over 20 years ago by Bench¹⁸ involved placing a sound source over the abdomen of a pregnant woman and measuring the transmitted sound level at the cervical os. This experiment showed that the maternal tissues attenuated the noise by 19, 24, and 38 dB at 200, 500, and 1,000 Hz respectively, and by about 48 dB at 2,000 and 4,000 Hz.

The experimental data on intrauterine noise has confirmed that the fetus does not live in a quiet environment. It is exposed to constant internal noise that arises from maternal bowel sounds and arterial pulsations; these have been reported to range from 56 dB to as high as 95 dB. 18-20 Bench described intrauterine background noise of 72 dB, but since the measurement was made at the cervical os rather than from inside the uterus, this measurement could understate the actual level. As described later, however, some researchers think that this reported level is too high. That the maternal and uterine arterial pulsations contribute to the background noise was demonstrated by Walker and colleagues²⁰ when they showed a direct association of the sound pressure peaks with the maternal electrocardiogram.

This last study, done with 16 pregnant women, measured by means of intrauterine microphones both intrauterine noise levels and sound transmitted through the abdominal wall from an experimental noise source. These results showed a naturally occurring mean noise level inside the gravid uterus of 85 dB, with peaks to 95 dB. Attenuation of the experimentally produced external sound varied with the frequency, and ranged from 20 dB at 50 Hz to 60 dB at 3,000 Hz. The findings compare favorably with those reported earlier by Bench, and show a progressive increase in attenuation with increasing frequency.

These studies were done after rupture of the amniotic membranes, and consequently without the amniotic fluid, which has an acoustic impedance that is different from that of air. Considering this difference in impedance, one researcher has suggested that the natural intrauterine background noise level is 56 to 57 dB, rather than the previously reported 72 to 95 dB. 19 Even with this correction, he identified maternal bowel sounds of 60 dB, which is in excess of the corrected background level. For comparison, a typical office environment has a noise level of approximately 50 dB. 1

One of the researchers has concluded that it is unlikely that normal external environmental noise overcomes masking from the internal background noise. ²⁰ In view of the previously discussed attenuation levels, however, it is conceivable that low-frequency external sound in excess of 85 dB could reach the fetus with only a 20-dB attenuation, and this does exceed the intrauterine background sound level.

Experimental external noise has been a basis for demonstrating viability in a fetus, and as early as 1936, Sontag²¹ demonstrated increased general activity and heart rate in third trimester fetuses exposed to a 120-Hz sound source near the mother's abdominal wall. This experiment showed a significant

change in activity in response to the vibratory stimulus from 29 weeks' gestation until birth. One could question, however, whether this represented activity in response to cochlear or to general vibratory stimulation.

Other experiments indicate that neuromotor function is probably mature by the 25th week, and functional hearing well established at 28 weeks' gestation. This was demonstrated in 236 fetuses by ultrasound monitoring of the fetal blink-startle reflex induced by a 110-dB, 250- to 850-Hz external noise source. The investigators considered that this sound would be attenuated by about 15 dB, but on the basis of the work done by Bench, as well as other researchers, 18,20 this estimate is probably too low.

There have been suggestions that incubator noise of about 70 dB may damage the hearing of premature infants, depending upon the length of exposure, 9 and Douek and coworkers 12 reported "circumstantial evidence" for hearing damage in premature infants who were treated in incubators. Another study, however, did not confirm that the hearing loss noted in premature infants was due to incubator noise, but did find neonatal bilirubin levels and apneic attacks to be predictors of hearing loss. 10 These findings emphasize the numerous variables that complicate research about hearing loss in children; researchers must account for them when they attempt to interpret experimental data.

Epidemiologic studies have described hearing deficits in children born of mothers who worked in noisy environments while they were pregnant. ^{15,23} One of these studies reported hearing deficits in 35 of 75 children, ages 10 to 14 years, whose mothers had worked in weaving industries, where there were noise exposures of up to 100 dB during their pregnancies. ¹⁵ No control subjects were included, however, and there is no indication that allowances were made for possible adverse medical histories.

In a cross-sectional study of 131 four- to sevenyear-old children of mothers reportedly exposed to noise levels estimated to be from 65 to 95 dB TWA during all of their pregnancies done just a few years ago,²³ the researchers concluded that there was a threefold increase in hearing loss over 10 dB at 4,000 Hz in the 85- to 95-dB exposure group, as compared to the lower exposure group. One to three frequencies other than 4,000 Hz were also reported to be involved in 60% of the affected subjects, however, with 36% of these showing "sloping" audiograms. Such audiograms are not characteristic of those seen in noise-induced hearing loss, which have a "notch" at 4,000 Hz.

Sixty-nine percent of their subjects had jaundice

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at birth, and 40% had spent some time in incubators; a few (13%) had finger or foot anomalies, or a hernia. None of these physical anomalies are part of known syndromes associated with hearing loss, but the levels of jaundice and incubator noise levels were not addressed in detail. Children with middle ear problems at the time of testing were reportedly excluded, but details about the neonatal period and childhood illnesses were obtained only by interview, instead of by review of their medical records. Also, there is no indication in the report that the state of the mothers' health during their pregnancies were confirmed by review of their medical records.

Conclusions

What does a physician advise a woman who may be exposed to noise, either at home or work? Because of the prevailing intrauterine background noise and the attenuating capacity of the surrounding maternal tissues, it seems unlikely, except in unusual circumstances, that hearing loss is induced in utero directly by external noise. The maternal tissues can significantly reduce the effective sound pressure level before it reaches the fetus, and the attenuation is more effective at higher than at lower frequencies.

On the other hand, because the OSHA standards were formulated to apply to healthy adults working eight hours per day for 40 hours each week,⁷ they may not be directly applicable to infants and fetuses. Caution should be exercised when the calculated noise exposure to the fetus exceeds 90 dB.

None of the previously described studies addressed the question of the effect of impact noise on fetal hearing, and it is possible that such noise could have an effect different from that of continuous noise. As a hypothetical example, assume that the impact sound produced by a tool or machine being used by a pregnant woman is 120 dB. Using the sound attenuation levels described by both Bench¹⁸ and Walker,²⁰ one can calculate that the sound reaching the fetus would be 100 dB (120 dB minus 20 dB) at 50 Hz, and 85 dB (120 dB minus 35 dB) at 850 Hz.

Continuous sound at these levels has the potential for causing permanent hearing loss, depending upon heredity and the duration of exposure⁷; due to the recovery phase experienced by the ear between impulses, intermittent noise has been generally regarded as less likely to cause this damage. A study of Finnish shipyard workers, however, seemed to show that

permanent threshold shifts in hearing occurred more rapidly with exposure to impulse noise than to continuous noise.24

These contradictory opinions make it hard for physicians to confidentially counsel expectant parents about the effects of loud noise on the hearing of their unborn children. Since fetal hearing appears to be functional at 28 weeks' gestation, and the ultimate effect of noise on fetal hearing is controversial, a conservative approach would be to advise women to limit their exposure to loud noise during the last trimester of pregnancy. The best recommendation will depend upon individual circumstances, including the type of noise, the attenuation by maternal tissues at the various frequencies, the duration of exposure, and hereditary factors. More research is needed to clarify the issue.

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Nursing Homes: Reducing the Impact of Institutionalization

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Introduction

The placement of an older person in a nursing home is a very traumatic experience for both patient and family. Institutionalization is associated with a gradual decline in functional and mental capabilities and a significantly reduced life expectancy. About one-third of residents die within a year of admission, another third die within the next two years, and only one-third survive beyond three years. This death rate is higher among those who are institutionalized involuntarily and those who are mentally competent. Residents in nursing homes also have higher morbidity rates than their counterparts in the community, and are especially at risk of developing infections, repeated falls, urinary and fecal incontinence, and bedsores.³

The psychological impact of being admitted to a nursing home is very significant. It is associated with a gradual loss of identity, and often leads to severe depression for a number of reasons. Firstly, upon entering a nursing home, most residents do not expect to leave it. Indeed, whereas about 5% of the population over the age of 65 years live in nursing homes, 23% of this population die in nursing homes. Residents in nursing homes realize that they can no longer care for themselves independently and that their caregivers can no longer care for them in the community.

Secondly, the resident's former degree of independence is severely restricted. This is often compounded by a reduced mobility, and further isolates the patient from his family, his friends, and his own community. Opportunities for visits and contacts are reduced, which in turn deprives him of intimate family relationships at a time when he has neither the inclination nor the ability to develop substitute relationships. With institutionalization, the role of the individual in his own community is changed almost overnight. He may feel rejected by family, friends, and society, and frequently he is excluded even from the very decision-making process that ultimately leads him to be institutionalized. This is particularly the case if admission to a nursing home follows a period of hospitalization, because the patient often sees this transfer from hospital to nursing home as a prelude to death.

Thirdly, the degree of privacy the resident previously had is drastically curtailed. He may now have to share the room with one or more persons, and has to share most of the facilities with all other residents. Finally, as time goes by, the individual feels and becomes less and less a part of his own family, neighbors, and friends, and is gradually forced to divorce himself from his own society. At the same time he is forced to adopt and be adopted by an entirely different, more regimented and less personal society where there are basically two types of individuals: the "caregivers" and the "care receivers," the latter dependent on the former for most of their daily needs.

The patient now must accept and comply with an entirely new set of rules and regulations. For instance, he may have to eat and sleep at prescribed times, he may no longer be able to watch his favorite TV program, and may not even be able to have the food he likes. This in turn reduces his sense of initiative, increases his dependence on the institution for most of his needs, and often leads to a gradual regression to a childlike status, in which the individual is no longer able to make any decision. This is sometimes referred to as "learned helplessness" or "institutionalization."

It is a common experience in nursing homes to find elderly people sitting in a common room, staring blankly into space, with little spontaneous conversation going on between them. Oth-

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er common behavioral changes following admission to nursing homes include agitation, depression, mental impairment, apathy, negative image, low self-esteem, docility, and submissiveness. Residents often exhibit a lower level of interest, a gradual withdrawal from others, a tendency to live in the past rather than the future, and increasing concerns about death.

How to Reduce the Stress of Relocation

Nursing homes should provide a homelike atmosphere. Unfortunately most nursing homes are molded on the medical model, and often are converted hospitals with nursing stations and rooms on either side of long corridors. Furthermore, the space in the room is also often organized along the medical model, with the bed centrally situated in the room. This does not encourage socializing in the rooms, and discourages visiting by friends and relatives. The decor in rooms should be varied, and different in each room, to avoid the regimentalization effect. In shared rooms, the resident's privacy should be protected.

Residents should be encouraged to keep some of their personal possessions, such as a favorite armchair and objects of sentimental value. Similarly, hanging pictures of family members on the wall helps the resident maintain some form of identity and encourages visitors to talk to the resident about his family and friends, thus reinforcing his individuality. Being forced to share everything with other people may lead residents to construct defensive shells of isolation and to withdraw from their new community.

Residents should be allowed to maintain some sort of control over their environment and some degree of independence. Regimentalization should be avoided. Residents who are allowed to control their environment seem to suffer less from the effects of relocation.⁴

Old skills and hobbies should be maintained. Residents should be given responsibilities compatible with these skills, i.e., taking care of house plants, the library, and other activities in the nursing home. Similarly, residents could be encouraged to develop new skills in line with their capabilities.

A number of varied and interesting activities should be scheduled. Children's activities should be avoided. Residents should "look forward" to the next activity or entertainment and should be encouraged to play an active role in these activities. Activity calendars should be placed in prominent places to ensure that most residents are aware of these activities. The staff should "build up" the sense of anticipation among residents for the next activity.

Residents should be encouraged to develop new relationships with other residents. Caution should, however, be taken not to force these relationships. The seating arrangement in the dining room and day rooms is of particular importance. Chairs lining the walls in large rooms are not conducive to spontaneous socialization; to encourage socialization, four or five chairs should be arranged in a circle. More attention should be paid to the overall mix of patients if meaningful relationships are expected to develop between residents. This mix should ideally take into account the patient's ethnic group, cultural and religious background, education level, profession. and personal interests. Birthday parties are useful means of breaking the ice and introducing residents to each other.

Contact with family and friends should be encouraged and maintained. The family should be kept abreast of the resident's progress and invited to participate in developing an appropriate management plan.

Open visiting hours should be adopted, and visitors should be encouraged to come to the nursing home. Some degree of privacy should be possible, and residents should be able to provide their visitors with refreshments or other evidence of "hospitality."

SUMMARY

TEN SUGGESTIONS TO REDUCE THE IMPACT OF INSTITUTIONALIZATION

- Provide a homelike atmosphere
- Keep some personal possessions
- Avoid regimentalization
- Maintain old skills
- Schedule "interesting" activities
- Maintain contacts with family and friends
- Provide open visiting hours and privacy
- Encourage new relationships
- Provide adequate staff/resident ratio
- Develop prelocation programs

An adequate staff/resident ratio should be ensured. The mortality rate and functional status of the residents can be predicted by the total amount of time registered nurses spend in the facility.⁵ Recruiting and retaining competent staff to work in a nursing home is often difficult, however, because of the low prestige of working in such a facility and the relatively low pay. This rapid turnover, in turn, may discourage administrators from providing adequate training before employment.

Prelocation programs, with the resident participating in the decision-making process and visiting the prospective home prior to being transferred there, appear to reduce the mortality rate.⁶ Involuntary relocation should be avoided, and as much as possible the resident should be made to look forward to his transfer to the nursing home. This can be accomplished partly by emphasizing the advantages of being in a nursing home, while at the same time stressing that some degree of independence and autonomy will be maintained.

Conclusions

Nursing homes have a vital role to play in the care of the elderly population. They should not be considered as waiting rooms for death, but should be viewed in a much more positive light as a place where residents, despite their limited functional capabilities, can enjoy as full a life as possible. Every effort should be made to improve the standard of care residents receive in nursing homes, and to improve the morale of the people who work there.

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Immediate Reconstruction of Maxillofacial Gunshot Injuries

LARRY A. SARGENT, M.D. and STEPHEN R. STEINMETZ, M.D.

Introduction

Handguns or small firearms cause an increasing number of maxillofacial injuries in the civilian population each year. These low-velocity missiles are capable of producing complex comminuted facial fractures, as well as soft tissue injuries. The management of such wounds has remained controversial for many years. Some authors have recommended delayed soft tissue closure and secondary bony reconstruction, while others have advocated immediate definitive reconstruction.

The severity of the injury from a firearm is directly related to the amount of energy that is deposited or released into the tissue. This energy that is transferred to bone and soft tissue is dependent on the velocity and mass of the missile. Therefore, the severity of facial injuries from low-velocity missiles (handguns) should be significantly less than those from high-velocity injuries, all others being equal. The additional factors that should be assessed to predict the extent of injury include type of firearm, distance, drag, and density of tissue.

The treatment of complex facial injuries has dramatically changed over the past ten years. Delayed treatment has been replaced by early or immediate surgical treatment, and extensive bone injury repaired by bone graft reconstruction and rigid miniplate stabilization. These principles and advances made in the treatment of complex facial fractures resulting from blunt trauma have now been successfully applied to the treatment of low-velocity gunshot wounds of the face.

Case Report

A 38-year-old man sustained a close-range .38 caliber gunshot wound to the left side of the face. On initial evaluation in the emergency room the patient was awake and alert, with stable vital signs and no evidence of intracranial damage. There was moderate periorbital edema, with an entrance wound situated 2 cm below the inferior orbital rim surrounded by a large circular powder burn (Fig. 1). There was a stellate laceration in the left preauricular area, which appeared to represent the exit wound. An ophthalmologic evaluation revealed macular edema, with no apparent injury to the globe.

Radiologic evaluation by two- and three-dimensional CT scans revealed a severely comminuted left zygomatic maxillary fracture, a left lateral orbital wall fracture, and a blowout fracture of the left orbit (Fig. 2). The bullet appeared to go through the left maxillary sinus and deflected off the body of the zygoma, exiting in the preauricular area.

Initial treatment included debridement of the entrance wound, curettage of the tattooing created by the powder burns, and closure of the exit wounds. Four days later the patient was taken to the operating room for open reduction and internal fixation of the left zygomatic orbital fractures and reconstruction of the body of the zygoma with calvarial bone grafts.

The comminuted facial fractures were completely exposed through multiple incisions to achieve reduction and stabilization. The lateral wall of the orbit and zygoma were exposed with a coronal scalp flap, allowing reduction and stabilization



Figure 1. A 38-year-old man who sustained a close-range gunshot wound to the left cheek.

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Figure 2. Three-dimensional CT scan of face demonstrating extensive comminution of left zygoma and lateral orbit.

with miniplates of the zygomatic-frontal suture and zygomatic arch. The inferior orbital rim and floor were exposed using a subciliary incision; the rim fracture was stabilized with a miniplate, and the floor defect reconstructed with Vitallium mesh. An upper buccal sulcus incision provided exposure of the zygomatic-maxillary buttress, which, along with the body of the zygoma, was extremely comminuted and required reconstruction with multiple calvarial bone grafts. All bone grafts were secured with lag screws.

The postoperative course was uneventful, with healing of all the fractures. The photograph at 16 months shows that the pre-injury facial appearance has been restored (Fig. 3).

Discussion

The vast majority of gunshot wounds to the face involve varying degrees of both soft tissue and bone injury. The amount of energy transferred and the resultant destruction is dependent primarily on the mass and speed of the projectile. Handguns produce low-velocity projectiles traveling at speeds less than 1,000 ft/sec. As a result, the extent of injury is generally limited to the path of the bullet. Both the entrance and exit wound should be carefully assessed, and the tract of the projectile determined. The entrance wound from a handgun is similar to a puncture wound, with the exit wound being somewhat larger. The tissue injury is generally limited to the path, with the extent of destruction dependent on the resistance and where the greatest energy is released. In low-velocity handgun wounds, there is usually soft tissue and bone injury. Depending on the path of the bullet in the face, there may be comminuted facial fractures with bone loss associated with minimal soft tissue injury. The lack of injury to adjacent soft tissue is due to the lower velocity and lower energy deposited. In these types of injuries there is not the progressive tissue necrosis seen with high-velocity injuries. Thus, the facial fractures resulting from low-velocity gunshot wounds can be treated like complex facial fractures resulting from blunt trauma.3 Craniofacial surgery tech-



Figure 3. Postoperative appearance 16 months after definitive reconstruction.

niques are used to provide wide exposure of all fractures, with definitive bony reconstruction being accomplished in one stage. Immediate debridement and primary soft tissue closure is accompanied by stabilization of bone using rigid miniplate fixation and bone grafting, where needed. Each treatment plan is individualized, and depends on the assessment of the velocity and path of the bullet, with careful evaluation of soft tissue and bone injury and loss.

Conclusion

Gunshot wounds of the face may present a difficult challenge to the reconstructive surgeon. There may be a combination of bone and soft tissue loss, and frequently the bone injury or loss is the more severe. These wounds often communicate with the oral cavity, nose, and orbits, which can further complicate management. Applying the techniques of craniofacial surgery (wide exposure), rigid fixation with plates and screws and immediate bone grafting has been successful in the definitive one-stage treatment of low-velocity gunshot wounds of the face.

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An Elderly Woman With Weight Loss

Case Report

A 69-year-old woman was admitted to Vanderbilt Hospital for evaluation of anorexia, palpitations, and weight loss. The patient was healthy until four months before admission, when she had a progressive decline in mental status, with a depressed affect and slow responses. She had no appetite and lost 30 lb. She had difficulty sleeping, noted general weakness, and described occasional palpitations and tremulousness.

On physical examination, she was a cachectic woman with a blunted affect. She weighed 80 lb. Her pulse was 80/min and regular. Skin was warm and dry. The thyroid was smooth and slightly enlarged, but she had no lid lag, stare, or exophthalmos. Lungs were clear, and the cardiac examination was normal. Bruits were audible over the carotid, femoral, and renal arteries bilaterally. The patient had difficulty with calculations.

Laboratory evaluation revealed a PCV of 33%. Colonoscopy and abdominal CT scan were normal, but gastrointestinal endoscopy revealed a gastric ulcer, biopsy of which revealed benign tissue. The free T₄ was 3.53 µg/dl and TSH .59 µU/ml by supersensitive radioimmunoassay, consistent with hyperthyroidism. As the patient had received an iodine load for the contrasted CT scan, a thyroid scan was postponed. Methimazole therapy was initiated. The patient will have a thyroid scan in one month, and repeat endoscopy in eight weeks.

Discussion

In 1931 Frank Lahey described apathetic hyperthyroidism, a variant of classic hyperthyroidism. He stressed its indolent nature, its lack of the usual features of hyperthyroidism, and its potentially fatal outcome.1 Almost 60 years later, the diagnosis of apathetic hyperthyroidism continues to be elusive and poorly recognized.

Apathetic hyperthyroidism is predominantly a disease of the elderly, although cases have been reported in children and young adults.2 It is much more common in women. The disease has an insidious onset and varied manifestations.^{2,3} Patients characteristically have the placid, apathetic appearance described by Lahey.1

Weight loss is the most common complaint, and lethargy and anorexia are also predominant features. Palpitations occur in more than half of affected patients, and 40% of the patients in one series had atrial fibrillation³; the heart rate, however, is less than 100/min in most patients. Less common symptoms include heat intolerance, diarrhea, constipation, and nervousness.^{2,3} Tremor and a fine skin texture are common physical findings. The usual ocular manifestations of hyperthyroidism are notably lacking, and goiters are small or absent in the majority of patients.^{2,4}

Most authors implicate toxic nodular goiter as the most common cause of hyperthyroidism in the elderly.2,4 One comprehensive study of apathetic hyperthyroidism, however, found diffuse goiters in the majority of patients.³

The direct measurements of free T₄ and the supersensitive TSH radioimmunoassays have simplified the laboratory diagnosis of hyperthyroidism, and thyroid scan will distinguish diffuse from multinodular goiter. Treatment options include surgical resection, antithyroid drug therapy, and radioactive iodine administration, for which radioactive iodine uptake scanning is a prerequisite.4

The symptoms of hyperthyroidism may be subtle in the elderly, and masked by the presence of concomitant disease. Clinicians need to consider apathetic hyperthyroidism in the population, and have a low threshold for obtaining thyroid function tests.

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A Case of Noncardiogenic Pulmonary Edema

Case Report

An 84-year-old woman admitted to Vanderbilt Hospital for respiratory distress and pulmonary infiltrates had a history of chronic back pain secondary to degenerative joint disease, but

Prepared by Kathleen Maletic Neuzil, M.D., Hugh J. Morgan chief medical resident, Vanderbilt University Hospital, Nashville.

was otherwise in good health. Approximately two weeks before admission she was seen in a local clinic complaining of more severe back pain. Lumbosacral spine films revealed multiple compression fractures and diffuse osteoporosis, for which sodium salicylate was prescribed. Three days before admission the family noted that she had difficulty speaking, intermittent disorientation, and lethargy. She was more short of breath and felt feverish, though she had no chills or productive cough. She had a 60-pack-year smoking history.

Physical examination revealed a pleasant elderly woman with rambling, disoriented speech. Temperature was 100.2°F rectally, pulse 78/min, blood pressure 100/48 mm Hg, and respiratory rate 28/min. Heart sounds were normal. Rales were present at the right mid-lung field. There was no jugular venous distention, hepatomegally, or peripheral edema. Neurologic examination was notable for disorientation as to date and place. Laboratory examination was remarkable for sodium of 145 mEq/L, potassium 3.1 mEq/L, chloride 116 mEq/L, bicarbonate 13 mEq/L. Arterial blood gas analysis showed pH of 7.54, Pco₂ 15 mm Hg, and Po₂ 84 mm Hg on breathing room air. CBC was normal. Urinalysis demonstrated mild proteinuria. Salicylate level was 50.8 mg/dl. Chest radiograph showed infiltrates in the left upper lobe, right middle lobe, and right lower lobe.

The patient was admitted with a diagnosis of salicylate toxicity. She was not treated with intravenous bicarbonate because of her severe alkalemia. Empiric antibiotics were administered for possible pneumonia. During the next 24 hours, respiratory difficulty increased and hypoxemia became more pronounced. Chest radiograph revealed bilateral extensive alveolar edema. A myocardial infarction was not present by electrocardiographic and isoenzyme criteria. Echocardiogram demonstrated normal left ventricular function with an ejection fraction of 70%. All blood and sputum cultures were negative. The patient's clinical course was considered to be consistent with salicylate-induced pulmonary edema. She received supportive care with supplemental oxygen and mild diuresis. She gradually improved, and was discharged receiving supplemental oxygen therapy on hospital day 15.

Discussion

Salicylate intoxication is common, and may be due to acute ingestion or chronic administration. Many prescription drugs and over-the-counter medications, including Pepto-Bismol and oil of wintergreen, contain salicylates. Severity of toxicity is often difficult to assess, and any serum level >40 mg/di should be considered potentially serious.

The potential for toxicity in a particular patient depends on several factors. Some patients over age 70 eliminate salicylate slowly. The rate of drug absorption and the rate of renal excretion influence drug toxicity.

Acidosis enhances tissue penetration of salicylates. Finally, as salicylates are 50% to 80% protein-bound, hypoalbuminemia may lead to higher free salicylate levels and increased toxicity.¹

This patient illustrates many of the varied manifestations of salicylate toxicity, which include respiratory alkalosis, metabolic acidosis, central nervous system effects of tinnitus and disorientation, coagulation abnormalities, hepatotoxicity, gastric irritation, low grade fever, and noncardiogenic pulmonary edema,1,3 which has been reported in approximately 25% of patients with salicylate overdose. Risk factors for developing pulmonary edema include older age, cigarette smoking, and a history of chronic salicylate ingestion.3 Patients with pulmonary edema are more likely to have neurologic abnormalities, proteinuria, and higher serum levels than patients who did not develop pulmonary edema. The severity of the pulmonary involvement varies. While some patients demonstrate only moderate respiratory distress, others require intubation for progressive hypoxemia. The pulmonary edema usually resolves in one to seven days.3.4

Noncardiogenic pulmonary edema as a consequence of salicylate overdose is a well-described clinical entity. It should be considered in the differential diagnosis of any patient with bilateral alveolar infiltrates in the absence of cardiac dysfunction or obvious infection. Treatment is largely supportive, and directed at maintaining adequate oxygenation while attempting to lower salicylate levels.

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Unsteady Gait and Seventh Nerve Palsy in an Elderly Woman

Case Report

An 85-year-old woman was admitted to Vanderbilt Hospital for unilateral facial paralysis and ataxia.

The patient had a history of chronic atrial fibrillation but was otherwise in good health. Approximately one week before admission, she felt a sudden stinging pain in her right ear, which was treated with a topical steroid cream. A few days later, she had an unsteady gait and her children noted a right facial droop; she had no fever, chills, or vertigo.

Medical examination revealed a thin, elderly woman with obvious right facial weakness. Crusted, vesicular lesions and

moderate swelling were present about the external auditory canal, but the tympanic membrane was normal, and the oral pharynx was clear. The cardiac rhythm was irregular. Neurologic examination showed right facial weakness, an unsteady gait, and a Romberg sign. Admission laboratory data were normal. Cerebrospinal fluid analysis revealed 200 RBCs. 66 WBCs with 95% monocytes and 5% neutrophils. Cerebrospinal fluid protein was 79 mg/dl and glucose was 47 mg/dl. Bacteriologic and fungal stains revealed no organisms.

The patient's clinical presentation was believed consistent with herpes zoster infection of the geniculate ganglion, or Ramsay Hunt syndrome. She was admitted to the hospital.

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and with supportive care her unsteadiness improved. She was walking without assistance after several days. Her seventh cranial nerve palsy persisted at the time of discharge.

Discussion

Ramsay Hunt, Jr. first described herpetic inflammations of the geniculate ganglion in 1907.1 Since that time, Ramsay Hunt syndrome has been recognized as a relatively uncommon complication of herpes zoster infection.2

The varicella-zoster virus causes two clinical syndromes. Varicella, or chickenpox, is the primary infection, and zoster, or shingles, is a localized recurrence due to reactivation of latent virus within the dorsal root ganglia. Seventy-five percent of zoster cases occur in individuals over age 45, and the elderly represent a particularly high-risk group for its development.3

Clinical manifestations of herpes zoster in immunocompetent adults include a unilateral vesicular eruption within a dermatomal distribution, with pain preceding the lesions by 48 to 72 hours. Headache, fever, malaise, and adenopathy may accompany the illness, and the severity and duration increase with advancing age. Complications include dissemination, ocular and neurologic involvement, and postherpetic neuralgia.4

Ramsay Hunt syndrome is characterized by pain and vesicles confined to the tympanic membrane and external auditory canal, and a facial paralysis identical to Bell's palsy. Fifty percent of patients also have loss of taste in the anterior two-thirds of the tongue. Dysfunction of the eighth cranial nerve may also occur. Usually both the auditory and vestibular portions are involved, with varying degrees of unsteadiness, hearing loss, tinnitus, or vertigo. Cerebrospinal fluid abnormalities are common.2 Complete recovery of the facial paralysis occurs in approximately 50% of affected individuals, with significant improvement occurring in an additional 45%. Recovery from the vestibular and auditory symptoms is much less satisfactory, and seems not to be affected by antiviral therapy.5

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The Reduction of Black Infant Mortality:

An 18-Month Evaluation of Three Tennessee Black Health Care Task Force Demonstration Projects

OPHELIA R. BUTLER, MSW

The problem of low birth weight has emerged as the single most important cause of infant death or subsequent handicaps in infancy and childhood. Although low birth weight babies (below 5.5 lb) represent a small percentage of all babies born, well over half of all infant deaths occur among this group. The problem is even more serious for tiny infants.¹

Nationally, babies whose birth weights are very low (below 3.3 lb) are 200 times as likely as those with normal birth weights to die in the first few weeks of life, and three times as likely to suffer from congenital anomalies or developmental delays if they survive.² In 1986 the statewide black infant mortality rate was 18.6 per 1,000 live births, compared to the white rate of 8.7, indicating that black babies in Tennessee were twice as likely as their white counterparts to die in the first year.

The Department of Health and Environment, along with members of Tennessee's Black Caucus and the 94th General Assembly, worked to address these problems. As a result, the Department obtained an appropriation from the 94th General Assembly to fund special activities related to health care needs and concerns of black Tennesseans. Subsequently, the Black Health Care Task Force was established by the Department in 1986 to advise the Commissioner on the implementation of these activities.

Since 1987 the task force has recommended funding for three infant mortality reduction pilot projects in the two Tennessee counties having extremely high black infant mortality rates.³ These projects—Alton Park/Dodson Avenue Health Care in Hamilton County, Memphis Health Center, and Memphis/Shelby County Health Department—established goals to:

From the Division of Information Resources, Tennessee Department of Health and Environment, Nashville.

- Improve birth weight and survival rates of black infants born to indigent and Medicaid-eligible women;
- Reduce maternal morbidity among indigent and Medicaid-eligible women;
- Enhance the participation of indigent and Medicaid maternity clients in appropriate and timely prenatal, intrapartum, and postpartum services;
- Reduce the incidence of unplanned pregnancies among adolescents; and
- Increase the utilization of family planning services by indigent and Medicaid-eligible women.

The task force identified the potential target population for the pilot projects as black women who:

- Previously had very low weight infants (under 3.5 lb);
- Had medical conditions associated with poor pregnancy outcome, such as hypertension, diabetes, or sickle cell disease;
- Are between 10 and 17 years of age with a previous pregnancy; or
- Are under 17 years of age.

This report presents the outcome data analysis of the demonstration projects and provides a brief progress account of three programs developed to improve pregnancy outcomes of 377 maternal participants through the use of alternative approaches to outreach, patient care, and enhanced reimbursement methods. The objective of the analysis was to assess whether or not the projects had a positive effect on birth outcome with a subsequent reduction in infant mortality. The data for this analysis are based on enrollment data provided by the projects, linked to birth and infant death certificates retrieved from the Department's Vital Records, and represent the analysis of only those 377 maternal participants and their deliveries (out of 389 enrollees). Therefore, rates, ratios, or proportions presented here reflect only that data for which records were available.

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Statistical validity is seriously affected by a small number of observations.

The results from this limited 18-month evaluation suggest that during the study period, July 1, 1987 through Dec. 31, 1988, the projects experienced no births under 500 gm, with a small reduction in low birth weight babies, and a greater proportion of babies over 2,500 gm, compared to the population outside of the projects. The results suggest that there was a lower infant mortality rate within the projects than outside them.

Specifically, 92.5% of the births that occurred during the study period in the Memphis/Shelby County Health Department project, 87.9% of the births in the Memphis Health Center project, and 89.6% of the births in the Alton Park/Dodson Avenue project weighed over 2,500 gm (not low weight).

Of births statewide during the same period, excluding the project counties, 87.3% were over 2,500 gm. This reflects a greater proportion of normal weight babies being born to women enrolled in the projects than to women outside of the projects.

The data from the projects demonstrate an infant mortality rate of 10.8 per 1,000 live births for Memphis/Shelby County Health Department, 9.7 for Memphis Health Center, and no deaths for Alton Park/Dodson Avenue. This compares to an infant mortality rate of 21.3 and 14.7 for non-project infants in Shelby and Hamilton Counties, respectively, during this time period. Of the 377 known births, 192 (50.93%) had adequate prenatal health care, 131 (34.75%) had intermediate prenatal care, 48 (12.73%) had inadequate prenatal care, and 6 (1.59%) had no prenatal care.

Keeping in mind the limitations of the small numbers of observations and availability of records, the data compare the two Shelby County projects to all other black live births in Shelby County. According to the Kessner Index, there is generally little difference in the percentage of adequate prenatal care for black infants between Memphis Health Center and the remainder of the county. The Memphis/Shelby County Health Department showed a 10 point less differential in the comparative percentage of adequate care than other

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black infants born in Shelby County during this review period. Memphis Health Center and Memphis/Shelby County Health Department each had births having no reported prenatal care.

The Alton Park/Dodson Avenue project experienced the highest percentage of project participants receiving adequate care compared to all other live black births in the state, as well as in the other two infant mortality reduction projects. The Alton Park/Dodson Avenue project also compared favorably with statewide data in that 51 (66.23%) participants received adequate care, compared to 65.81% within the remainder of the state.

To gain an actual picture of the timing of care within the projects, it is suggested that the timing of prenatal care, the length of prenatal care, and a comparison of medical records and vital records should be evaluated and included in the final three-year study.4

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Medicine—A Business or Profession?

J. KELLEY AVERY, M.D.

Foreword—This "Case of the Month" is a departure from the usual in that I will present a case where no litigation was or will be involved. I believe, however, that it epitomizes the basic reason that the public, our patients, are increasingly prone to file medical malpractice lawsuits.

Following one of SVMIC's Loss Prevention Seminars, a youngish doctor rather angrily approached me with the statement that, "The practice of medicine is a business and you try to make it something else." I admitted to "trying to make it something else," but agreed that in the practice of medicine one had to apply good business principles. It was this insistence that our work was strictly a business that caused me to remember the experience when I got a letter from a colleague that will be the basis for this "Case of the Month."

See editorial comment in this issue.

My colleague, whom I had not seen for several years, wrote of his own experience. I will not describe the contribution that I believe this retired physician has made to the health of Tennesseans over the years for fear of breaking the confidentiality that my friend expected when he wrote:

Recently I had a herniorrhaphy at a local major hospital. An anesthesiologist, whom I did not know, was assigned to my case. Since I have had seven previous generals, I wanted to discuss the possibility of a spinal.

He did not visit my room preoperatively. After receiving preoperative medications in my private room, he did greet me on entering the operating room. The operating room was set up for general, so I said nothing.

The general must have been excellent for I awoke promptly, well-oriented and hungry.

Dr. Avery is chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood, and medical director of Ambulatory/Outpatient Services, St. Thomas Hospital, Nashville.

He did not visit me postoperatively to see that I did well.

Less than a week later, I received a bill with a statement that full payment was expected now and that Medicare and Blue Cross would not be filed until after the full payment was received.

About two months later, a notice from Blue Cross arrived that it had paid the anesthesiologist the difference between the charge and the Medicare reimbursement. I called the anesthesiologist's office asking for a refund. It came promptly, signed by the doctor, with no attached note.

I did receive an excellent anesthetic but had I been a layman and anything gone wrong in the operating room, or later, the anesthesiologist had opened the door widely to anger (the way the bill had been presented), to medical doubt (no preoperative or post-operative visit), and to disappointment (no discussion of the route of the anesthesia).

In other words, if anything had gone wrong whether or not due to poor medical practice (we doctors know the unexpected after all does happen) it would have required a most forgiving soul to have passed up the opportunity for a juicy lawsuit.

My plea is that doctors always treat patients as people and not as machines in our repair shop.

Loss Prevention Comments

In our discussion of this case, let's try to forget that the patient is one of the most respected physicians in the area of the state where he practiced. Let's assume that we are dealing with an ordinary patient. Let us also allow some latitude for the anesthesiologist who does have great difficulty in this day and time trying to adequately evaluate his patient preoperatively and to establish any kind of rapport or relationship with him. But, for the conscientious, caring physician, regardless of the specialty, this evaluation and rapport are absolutely essential.

Let's think primarily about the financial obligation owed by the patient to the doctor. This side of the physician/patient relationship is becoming increasingly difficult for most of our patients to meet. The surprise of a bill that is impossible to pay causes many patients to become plaintiffs. Just as our patients have a right to

understand and consent to the procedure, they have a right to know something of the financial obligation that they are assuming. Without either, if anything should go wrong with the experience, litigation is almost assured.

In this particular case there was good insurance coverage. This patient had both Medicare and Blue Cross. Payment of all the allowable charges was virtually a given! Why demand payment before filing the claim and receiving payment from the carriers? It is difficult to imagine, in a specialty with as high a risk for litigation as anesthesiology, that a physician or group of physicians would demand payment before filing the assured insurance coverage. This is literally holding the patient's funds hostage, and is a practice to be condemned if, indeed, it is not illegal in the first place! I believe the anesthesiologist in this case would have refunded this patient's Medicare-Blue Cross payment, but it is interesting that the refund came so promptly after the patient called the doctor's office and requested it. This paints a picture of a highly trained serviceman who believes the money derived from his work is the only important element in the transaction.

Are we engaged in a profession or a business? "Both," you answer, and you are right. But, strictly speaking, we are still considered professionals by the public and under the law, and we had better understand the difference before we lose the privilege! As profes-

sionals, we are given the privilege and responsibility of controlling access to our profession. Our license is granted under conditions largely developed and controlled by our peers. Although we have not done an adequate job in the past of policing our ranks, our peer review activities can have the weight of law and are protected by it. Whether or not we do a good job in our practice is judged by a standard that is established by the way we do things as doctors, not by legislative act. These privileges are granted us by a society that values our services to that society above the level at which it places the services of the ordinary business, which has to be licensed. We have lost a lot of the public respect that goes with being members of a profession. Why?

Could some of the deterioration in our image be due to our acting without regard to the public demands for a service only we are able to provide? How can we allow a person like the anesthesiologist in our case to become one of us? It is only because somewhere along the road to becoming a physician, he never got the message that our first obligation is to perform a service for the patient who trusts us, and that rewards can only be the result of those obligations, fulfilled in a manner that values first the whole person, including the responsibility to be fair in our financial dealings with that person. In this case, bill collecting appears to have been the most important aspect of this doctor's business.

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Old Dog and Old Tricks

WALTER D. HANKINS, M.D.

With so many marvelous new advances in medical care within the past few years we sometimes seem to forget some old tried and true remedies.

I am thinking specifically of acute bursitis or tendinitis with or without calcium deposits. This rather common affliction, which can be quite painful and disabling, usually involves the shoulder, but sometimes it is seen in the hip or wrist. Radiation therapy in the early acute stages gives almost complete relief in a few days in 75% to 80% of cases. The usual treatment is 200 rad in air, using a small port with either a cobalt unit or linear accelerator. If no relief or partial relief is obtained within 48 hours, one or two additional treatments are given at 48-hour intervals. If no relief is obtained after three treatments, then other therapy is indicated. The important point is early and immediate treatment after onset of symptoms, since results are not nearly as good in chronic or long-standing cases. Neither is this therapy effective for the so-called tennis elbow, or epicondylitis.

Many new doctors are not aware of how effective the above therapy is, probably due in part to so much being written about the dangers of radiation, so that the thinking has become that radiation should never be used except for malignancies.

Bursitis or tendinitis almost never occurs in young adults, and is seen mainly in patients past the third decade. The amount of radiation noted above is minimal and certainly harmless, and is less traumatic than injections and needling, which are often ineffective. Cases that have calcium and respond to radiation may occasionally have a recurrence of their symptoms, in which case they may safely be given one or three more treatments. If then they later recur, surgical removal of the calcium deposit offers quite permanent relief.

In the past, radiation was used for many things that in the present state of our knowledge we know were contraindicated. In the early days before antibiotics were available, tuberculous adenitis, carbuncles, pneumonia, and postoperative parotitis were treated with radiation with some measure of success, but such measures have long since been discontinued. Numerous other diseases such as acne, birthmarks, thymic enlargesinusitis, lymphoid hyperplasia nasopharynx and eustachian tubes, arthritis, and tinea capitis, to name only a few, were irradiated without beneficial effect, and in fact caused damage, particularly in young children. This, however, does not negate the usefulness of irradiation in selected cases such as

The above have been my observations during 52 years of radiologic practice, in the course of which several hundred cases of acute bursitis were treated.

I believe young physicians should be aware of the effectiveness of this noninvasive, safe modality. For radiation failures, injections and needling may be tried, or surgery as a last but effective resort when calcium is present.

Reprint request to PO Box 5400 EKS, Johnson City, TN 37603 (Dr. Hankins).

REWARD

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The Living Will

PAUL R. STUMB, M.D.

In the last several years, increasing attention has been given, both in the medical literature and in the lay press, to the living will. As with other ethical issues, we know from the outset that there is not one simple, or even one complicated, answer. Our challenge then is to address the problem in such a way as to enable our patients to continue to have control over their own medical decisions and to do it in a way that is both humane and medically sensible and at the same time fits into the current legal structure.

At a recent joint meeting of the Nashville Academy of Medicine and the Nashville Bar Association a panel discussed these issues. One of the panelists commented it perplexed him that we often make decisions for our loved ones that we would not want for ourselves. Indeed, it is much easier to say, "If there is no chance of survival, I do not want you to plug me into all those machines," than to give the same instructions for someone else. A major part of the problem then lies in developing a system of designated instructions whereby, while mentally competent, we can state our intentions in a way that others will feel comfortable in honoring.

Enabling legislation for the "Living Will" was passed in Tennessee in 1985. The important parts of this legislation are (1) a patient may designate that he does not want life-sustaining modalities in case of irreversible medical events, (2) he may designate another chosen individual as his spokesman for medical decisions through the "durable power of attorney," and (3) the physician is protected in that he is supported if philosophically he is in agreement with the patient's decision and, if he is not in agreement, he may request that another physician be called in.

A major problem with the concept of the living will is that most people who might have need for it simply do not know that it exists. It may not be surprising to learn that knowledge of its existence is directly related to educational level, so that many who have a need for it are the ones most likely not to know that it exists.

While we are told that 15% of the population now have some form of living will, as compared with only 8% four years ago, we still have a long way to go in educating our patients and in guiding them through whatever decisions they might wish to make.

Another major problem is that there is no uniformity in the 50 states with regard to the entire concept. Some states allow withdrawal of a feeding tube and some do not. The definition of terminal illness varies from state to state and there is variation in the degree to which physicians are legally bound to honor the living will in the different states.

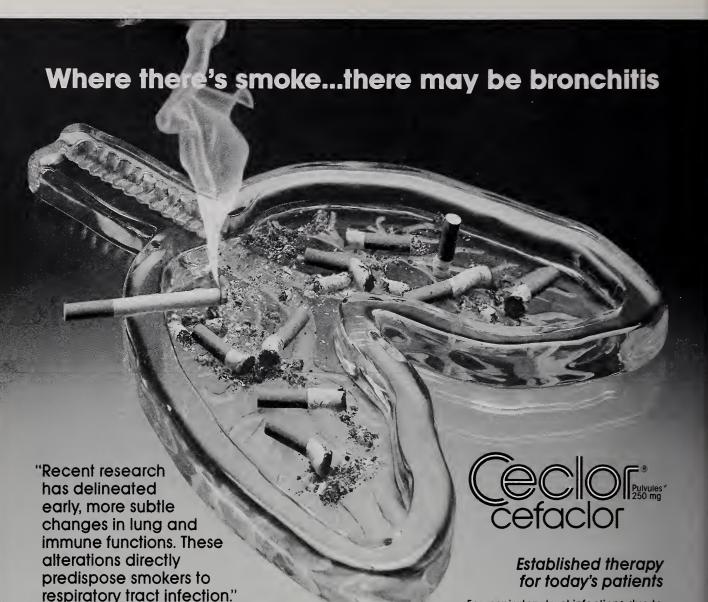
What, then, can we as physicians do to solve some of these problems and to make the existing system work in the most effective way? The first thing we might do, particularly those of us who are primary care physicians, is to educate our patients about the concept of the living will and its availability. We might make a part of our history taking with each patient the question, "Have you thought about what you might want if an accident left you alive but comatose?" Materials for patient education are fairly readily available through most medical societies or from Alive Hospice. Another thing we might do is push for federal legislation that would gain conformity among the various states. While it might not be realistic to have one federal law mandating such conformity, the least we might do is to enable recognition by each state of the validity of the law in other states, so that if a traveler has an accident out of state, he would be allowed the same treatment that he would receive at home.

Another element of patient education that easily follows when we discuss "end of life" issues with our patients relates to organ donation. By remembering this, we can allow many of our patients who might not otherwise think about it to simply designate by requesting at the time of drivers license renewal or by discussing with their family their own intention to allow donation of organs should an accident occur.

As a profession, we receive a lot of criticism as being uncaring and self-serving. Here is an opportunity for a small move toward correcting that perception.

27 JANUARY, 1991

Dr. Stumb is in private practice at 514 Medical Arts Building, Nashville, TN 37220.



Consult the package literature for prescribing information. Indication: Lower respiratory infections, including pneumonia, caused by Streptococcus pneumoniae, Haemophilus influenzae, and Streptococcus pyogenes

Am Fam Phys 1987;36:133-140

Macmophilus influenzae, and Streptococcus pyogenes (group A β-hemolytic streptococci).

Contraindication: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS.
PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLINES AND DEVEN AUGUSTA. INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.
Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics, it must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

- Discontinue Ceclor In the event of allergic reactions to it. · Prolonged use may result in overgrowth of non-
- susceptible organisms.

 Positive direct Coombs' tests have been reported during treatment with cephalosporins.

 Ceclor should be administered with caution in the
- presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.

 Broad-spectrum antibiotics should be prescribed with
- caution in individuals with a history of gastrointestinal
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)
Therapy-related adverse reactions are uncommon. Those reported include:

 Hypersensitivity reactions have been reported in about 1.5% of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions have been reported with the use of Ceclor. These are characterized by findings of erythema multiforme, rashes, and other skin manifestations accompanied by arthritis/arthralgia, with or without fever, and differ from classic serum sickness in that there is infrequently associated lymphadenopathy and proteinuria, no circulating immune complexes, and no evidence to date of sequelae of the reaction. While further investigation is ongoing, serum-sickness-like reactions appear to be due to hypersensitivity and more reactions appear to be due to hypersensitivity and more often occur during or following a second (or subsequent) course of therapy with Cector. Such reactions have been reported more frequently in children than in adults with an overall occurrence ranging from 1 in 200 (0.5%) in one focused trial to 2 in 8,346 (0.024%) in overall clinical trials (with an incidence in children in clinical trials of 0.055%) to 1 in 38,000 (0.003%) in spontaneous event reports. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after essation of therapy occasionwithin a few days after cessation of therapy; occasionally these reactions have resulted in hospitalization, usually of short duration (median hospitalization = two to three days, based on postmarketing surveillance studies). In those regulring hospitalization, the symp-toms have ranged from mild to severe at the time of admission with more of the severe reactions occurring in children. Antihistamines and glucocorticoids appear to enhance resolution of the signs and symptoms. No serious sequelae have been reported

· Stevens-Johnson syndrome, toxic epidermal necrolysis,

and anaphylaxis have been reported rarely. Anaphylaxis may be more common in patients with a history of

For respiratory tract infections due to

susceptible strains of indicated organisms

may be more common in patients with a history of penicillin allergy.

Gastrointestinal (mostly diarrhea): 2.5%

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.

As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.

Rarely, reversible hyperactivity, nervousness, insomnla, confusion, hypertonia, dizziness, and somnolence have heen reported

been reported.

been reported.

Other: eosinophilla, 2%; genital pruritus or vaginitis, less than 1% and, rarely, thrombocytopenia and reversible interstitial nephritis.

Abnormalities in laboratory results of uncertain etiology.

Slight elevations in hepatic enzymes.

Transient lymphocytosis, leukopenia, and, rarely, hemolytic anemia and reversible neutropenia.

Rare reports of Increased prothrombin time with or without clinical bleeding in patients receiving Cector and Coumadin concomitantly.

Abnormal urinalysis; elevations in BUN or serum creatinine.

Positive direct Coombs' test.
 Pasitive direct Coombs' test.
 False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest® tablets but not with Tas-Tape® (glucose enzymatic test strip, Liliy). PA 8791 AMP

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.



Eli Lilly Industries, Inc Carolina, Puerto Rico 00630 A Subsidiary of Eli Lilly and Company Indianapolis, Indiana 46285

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HAMEL B. EASON

Decisions and Consequences

I am personally against abortion.

I have said this on many occasions. It is based on my religious beliefs and my interpretation of the mission of medicine and its long-established ethics. One time when I made this statement before a TMA reference committee, my good friend and one of TMA's most thoughtful and idea-executing members, Hays Mitchell, said, "Well, Hank, if that's the case, you will have to give me a solution to teen pregnancy and the epidemic of low birth weight babies." Of course, he is right. I know responsibility comes with crisp, clear decisions from which there is no turning back.

The AMA, TMA, and many other of our institutions cannot make such a clear and crisp decision because there is division in our ranks and the issue becomes divisive. I believe we will be "in neutral" on abortion for some time. Meanwhile, those of us who would prohibit it must work on these parallel problems of teen pregnancy, low birth weight babies, incest pregnancy, rape pregnancy, therapeutic abortion, biologic use of aborted fetal tissue and organs, surrogate motherhood, fertility research, and legal and ethical issues regarding stored ova and sperm. As these parallel issues closely related to abortion are approached, maybe solutions will evolve to take away abortion.

As late 20th century Americans, we seem to claim as a right endless choices and unlimited options. The other shoe, which is endless consequences and unlimited responsibility never drops. When this scene plays out biologically, it is a massively expensive low birth weight baby in the neonatology unit, or a crack baby, or a new participant in the Aid to Families With Dependent Children cycle. Society pays and gets little in return. We need a new way.

As doctors, we like education. We have received a lot of it and through it have contributed to society. So often, education has been given as the answer to tough problems like AIDS, smoking, and alcohol abuse. Some impact ensues with education, but not much. These are moral and addictive and some other kind of problems and need more than education—so is the problem of teen pregnancy. Children should receive biologic education, including sex education. Without some moral framework, a child just thinks, "I understand this, I want it, I'll take a chance." I believe the moral framework should come from family and church. That is what helped me decide against abortion. We must promote this element. Every man, woman, and child needs a conscience.

As a society, I believe we should continually remind those who would make a "choice" that they must live with the consequences. We must offer an incentive program to do right, and be hurt when you fail. People will respond to that even when their value system is thin.

A paper from Vanderbilt in the Nov. 7, 1990, *JAMA* outlines the efforts of the Tennessee Medicaid Program to expand prenatal care and influence pregnancy outcome. Some small new things are happening. The Institute of Medicine Committee To Study Outreach For Prenatal Care recommends, "a new maternity care system." I would hope we could build on the strengths of our present system with better access and social support for the poor and uneducated pregnant.

I am really out of my expertise in this "President's Page," but I have studied some, worried a lot, and still have hope in the people of the USA. I hope you can join in and approach this problem in Tennessee where you live. The talent is here.

I am personally against abortion.

Hamel B. Esson M.D.

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JANUARY, 1991

editorials

Happy 1991 From Janus and Us

I am a poor one to be giving lessons in mathematics, having never consistently gotten 4 as the sum of 2 plus 2, and usually not even spelling mathematics correctly the first time. Nevertheless, a brief review is necessary to start this piece to be sure we are on common ground. Since I am the only one around to give the review, here goes.

Not being very bright about such things, I was a

long time understanding why we are in the 20th century at the same time we are only in the 1900s. I finally discovered it is just that since zero equals nothing, and it is mathematically necessary to use real, whole numbers for members of a series of things, numbering of any such series has to begin with one, and not zero. This explanation might not satisfy a mathematician, but it ought to get across to you that there never was and never could have been a year zero; the first year, regardless of whether the reference point was the imputed birth of Jesus or some other one, had to be the year one. The year 10, then, was not the first year of the second decade, but the last year of the first decade, and the first year of the next decade was of necessity the year 11. Therefore, the last decade of the second millennium (which is the millennium we are in now, remembering about centuries) began on the New Year's Day just past (1991), and not Jan. 1, 1990. By the same token, the turn of the century, which will this time also be the turn of the millennium, will take place on Jan. 1, 2001.

I realize you already know all that, and have made some sort of peace with it. I am not at all sure, though, that I have—made any sort of peace with it, that is. Rolling numbers from 2000 to 2001 on a digital display is pedestrian at best. On the other hand, the change from 1999 to 2000 is little short of spectacular; in fact, it is spectacular as the whole works rolls over all at once. It has done that only once before in our present era, and that was a thousand years ago. Since I am almost certain there were no rollover digital displays around at that time to roll over, so far as the years are concerned the whole works has never before visibly rolled over at all. I think, then, there is reason to suspect that none but the most blasé will fail to be impressed, and only the most tedious among us are going to be deterred by so small a technicality from making a real commotion when the orange ball drops in Times Square at midnight Dec. 31, 1999. You can bet that that, so far as all the party-goers are concerned, is going to start the new millennium, technical variety to the contrary notwithstanding. After all, what's one year among celebrants, particularly on New Year's Eve? Who even cares?

Whichever way that turns out, technically—and tediously—speaking, as I write this it is a week before Halloween in the last year of the next to last decade of the second millennium of the Christian era. By the time you read it, though, we will all, even down to the last tedious purist, be well into the *last* decade of the etc., etc.

I have said all this at the risk of appearing condescending, and it may all seem to you much ado about

very little; it likely is, but I carry on so about it because we will have to make that one brief, shining moment do for another thousand years—always providing, of course, that we, speaking generically, make it through this last decade. And then there is, again of course, always the possibility that by rollover time none of this will make any difference at all to anybody, if indeed anybody is left for it to make any difference to. Who knows?

Well, Janus knows, for one. Janus was a Roman god who had two faces so that he could see into both the past and the future, which might be an advantage except that he couldn't see the present, which is where the action is. I wouldn't count on too much help from him if I were you. The other one who knows is God, who can see past, future, *and* present, but except for moral support He is unlikely to be of much help in prognosticating, either, as He is said to take a dim view of such pursuits.

I'll bet you thought this editorial was going to have a message. It did have, but after I read over the finished product I thought it all sounded awfully high-flown and pompous, and so I scratched the message part. I'm tired of messages, anyhow. It seems everything has to have a message these days; you can't read or look at anything that's there just because it's there, and for no other reason. Except this. Just so as to have *something* to offer you, I offer instead of a message a proposition. You have nearly a decade to work on it, and you don't have to decide anything now.

The advent of a new millennium is going to be a real happening, right? How would you like to celebrate it twice? If you play your cards right, you can stir up a real controversy between the purists, who insist that the new millennium starts Jan. 1, 2001, and the ordinary celebrants, who unless I miss my guess will go with the great rollover. The US Congress has just shown us that one can compromise on just about anything, principle or no, including eternal verities (which I doubt they believe in, anyhow). You can probably work it so as to multiply that one brief, shining moment into two brief, shining moments in successive years. You might even stretch the celebration out over the whole year between. Think of the possibilities! You could start a company selling millennium T-shirts and all sorts of things. The possibilities seem endless.

Note that in all of the above I have referred to "you." This time I meant it that way. There are some of us who are hoping just to still be around by then, and just to be able to get about without getting in anybody's way. On the other hand, the same could apply, you know, to any of the others of you, as well.

Happy New Year, then, from Janus and all the boys (generic) regardless of which decade you thought 1990 was in.

J.B.T.

Alas, the Poor Cochlea

The mountaineers with hairy ears They do not fool with trifles. . . .

Anon.

Hairy ears is what all of us, or at least almost all of us, and not just the mountaineers, have; it's a good thing, too, even if they are not the sort spoken of in the limerick. Those who don't have them are referred to nowadays as hearing-impaired—euphemistic for deaf. It is the hair cells of the cochlea that allow us to hear the things we want most to hear, and one would think we would therefore do everything possible to protect those hairs. We don't.

It is bound not to be news to you that we live in a noisy environment, some places noisier than others. We now have arrived at a pretty good understanding of what will damage the various components of the acoustical apparatus. Damage to hearing by sound is both time and intensity related, with continuous sound more damaging than intermittent sound. To protect ears in the workplace, OSHA has developed and implemented some fairly strict regulations that must be adhered to. In addition to just decibels, there is also a relationship of damage to the frequency of the sound.

Loud music is the norm these days, and one would think all the rock musicians would be deaf. Many of them are, but not from listening to their own sound; they just make their listeners and innocent bystanders deaf. Performers hear their own sound unamplified, the amplified meganoise being projected from speakers that are out in front of them. (Note that I do not speak here of music. Some of it may indeed be music, but the sound to noise ratio is often, even generally, pretty low.)

I'll bet that like me, you had always thought of a mother's womb as a nice, dark, quiet place where baby could develop in peace. Nobody has yet found that it is not dark, and I expect they won't, but then I would not have expected that anyone would have found it not quiet, either; but they did. We have in this issue of the *Journal* a paper from the Occupational Health Services of Martin Marietta Energy Systems about the effects of environmental noise on fetal hearing, which is functional by 28 weeks' gestation. It came as no surprise that some noise might filter through the barriers between baby and the out-

side world; some of that noise would almost be guaranteed to waken the dead. What I hadn't counted on was the high ambient noise of the intrauterine environment. Even if mama doesn't suffer from noisy bowels, a major source of not inconsiderable noise, the whirring-purring of the placental circulation as a steady source of noise never stops, and for baby's sake it hadn't better. Considering all that, even taking into account the damping effect of the abdominal and uterine walls, which varies according to their thickness and the frequency of the sound waves in question, there is indication that it does not take a whole lot of extraneous noise to push baby's cochleas to the limit.

It should be readily apparent to you that evidence for the nature of the damage to hearing and the intensity of the sound that can cause it is based upon animal experiments, data from which are not directly translatable to baby. In addition, there are other variables, both known, such as congenital defects and infection, particularly viral, and unknown, that can complicate the situation. It is therefore unclear what intensity of sound at what frequencies and for how long is necessary to cause permanent and significant hearing loss in the fetus. As Thurston and Roberts caution in their study, however, the evidence for damage is sufficient to warrant recommending that women limit their exposure to loud noise during the third trimester of pregnancy.

Among other things. And not just during the third trimester, either. The abortion issue has brought into focus the whole matter of constitutional rights of the fetus, since regardless of when society ultimately decides life begins, even the most obdurate has no doubt that at parturition an individual entered the world and was now fully protected by the US Constitution. If the mother has been careless of her unborn baby's health by abusing her own during pregnancy, to the extent that the baby's health and well-being are jeopardized, such as by using alcohol or other drugs known to produce fetal damage, courts are holding the negligent mother guilty of child abuse. As evidence accumulates, perhaps noise will be added to that list, particularly as our environmental ambient noise seems to be increasing apace.

The ideal solution would be, of course, to clean up the noise pollution along with that from other sources. The truth is, though, that pollution of all sorts has now become a specter that defies exorcism. Here in my office, as I write I have an exhaust fan from the laboratory running above my ceiling, and the fan of the computer tower running at my feet. Those are constant. Outside my window is a main traffic stream past one of the hospital entrances, which includes some of the traffic from the doctors'

parking lot. Sometimes I add radio to what is fast compounding into a din; even so, I work in a relatively quiet environment. All those sounds are sounds that generally go unnoticed because I am accustomed to them.

Given the increasing ambient noise in the environment, it should be unthinkable that anyone would, or would be allowed to, deliberately inject more noise into it. Not very long ago I would have been pessimistic that any regulatory measures to limit such pollution would stand a chance of enactment. I have been encouraged to think I might have been wrong by the extent to which society has been willing to limit tobacco smoking, and by ordinances that have sprung up limiting the output of boom-boxes and automobile radios. It may be that as the health hazards of noise become better defined and more widely appreciated, loud music and other loud sounds will become just as unacceptable as tobacco smoke.

You might work on that if you value your precious hearing, and that of your young.

J.B.T.

The Customer Is Always Right

Somehow the expression, "It's a helluva way to run a railroad" kept coming back to me, and that in turn recalled the story about the bedbug letter, which you may or may not have heard. In any case, I propose to recall it for you now. It seems a man traveling in a Pullman car found himself sharing his berth with a bevy of bedbugs. Upon writing the president of the Pullman Co. in high dudgeon, he received a most apologetic letter to the effect that such had never happened before, and immediate steps were being taken to ensure that it would never happen again. Stuck to the back of the letter was his own letter to the president, penned across the bottom of which was a note: "Send this SOB the bedbug letter."

I can't recall which business it was whose founder said it, but it really doesn't matter, and in any case it was likely not original. What does matter is that the particular business founded on the premise that "the customer is always right" was predictably and strikingly successful. I think, in fact, that one might carry that a step further and say that if any business operates on any other premise, it is bound to have a struggle surviving.

There are some real shockers in our Loss Prevention Case of the Month in this issue of the *Journal*. I suggest that if you have not read it, you stop right here and do it before continuing. It will simplify matters if you already know what I'm talking about. I

don't propose to retrace Dr. Avery's steps, because the way he has presented his case could not be improved upon. I simply have a few comments I wish to add about the practice of medicine as opposed to conducting a business. The differences are small, but they are critical.

The first shocker came from the doctor who maintained that medicine is a business. Now, any time money changes hands it is a business transaction, and in that sense, medicine is a business. That doctor also maintained, though, that medicine is strictly a business, "and you," he said, "are trying to make it something else." Dr. Avery allowed, appropriately, I thought, that indeed he was. The first rule of a business is that it must be operated so as to make a profit. Indeed, if it is not, the IRS rules it a hobby and not a business, and disallows all deductions. There is, of course, nothing wrong with making a profit, even in the practice of medicine; it is, in fact, necessary. In a business, though, making a profit is the primary consideration; if it is not, and the business is publicly held, the officers and board may find themselves the object of a class-action lawsuit. Avowing that the customer is always right has one object, and only one: to keep the customer coming back. It is a matter of enlightened self-interest, and nothing more. Not to operate on that premise is simply foolhardy.

Even more perplexing, though, is the attitude of the anesthesiologist. He was operating neither as a doctor nor as a businessman. His attitude was that of a hired hand, and an unkind one, at that—and maybe a dishonest one, to boot—whose only responsibility was to carry out an assigned order, and nothing more: Fix the patient so he will stay still, and won't hurt. He failed the test of the businessman, which is to keep the customer coming back, and of the doctor, which is to heal. Of course, he might argue that he had done his bit toward accomplishing the latter, but any such assertion would be false. He had an upset patient, and an upset patient is a patient who has not only not been healed, but has been wounded instead. The anesthesiologist violated the profession's cardinal precept, "First, do no harm." He harmed his patient, who may not have hurt while he was asleep, but did after he woke up.

The first order of business for a business has to be to make a profit, and though it had better not be the only one, a business has to be self-centered. This is the principal way in which it differs from a profession. Medicine, and therefore the doctor, has to have its attention focused on the patient, and not anywhere else. If it has not, then it is a business and not a profession.

Maybe that is, in fact, precisely what our angered

doctor thinks. Maybe, too, the anesthesiologist in question thinks of himself as simply a technician whose slogan is *I got mine*. He may be good at his craft, but he is no doctor. If such attitudes as those become consensus in medicine, then we shall deservedly lose the support and confidence of the public, not to mention our own self-respect. With those gone, the sooner medicine is treated as a public utility, which is the way some think of it already, the better off the public will be. Medicine as a profession will have been destroyed, and the sort of medical care the public now knows and demands will have vanished. Search where we will, a scapegoat will be nowhere to be found. The blood—the public's and our own—will be on our own heads.

What will our patients be known as then? Certainly not patients. Not customers, either, because in a successful business the customer is always right. Clients, maybe? Or just "individuals"? (Nurse, send in the next individual, please.) And what will you have then become, doctor? Maybe "mister"? Or maybe just, "Hey, you there—you in the white coat."

You can take some comfort in that nobody whose life depends on good medical care will still be around to say, "I told you so!" The comfort may, on the other hand, be small, particularly if you happen to be one of those, yourself.

Scrooge was able to save himself by repenting his lack of charity and mending his ways once he was shown his own unattended funeral and untended tomb, and had watched the crones pick over his personal effects. On the other hand, for Belshazzar, "Mene, mene, tekel Upharsin" came too late. His time had already run out.

Repent ye, therefore: It may be even later than you think.

J.B.T



The Right to Die

To the Editor

I just wanted to give a positive comment to President Hamel B. Eason's President's Page, "When Prowess Outstrips Prudence—Muddy Water," (*J Tenn Med Assoc* 83:579, 1990). I concur with him 100% and can be both emphatic and sympathetic inasmuch as I have done the

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same things he has done and feel like he is exactly correct. We should make these decisions between the physician, the minister, and the family. The government has no part in these decisions.

The kicker in that expression which I have just made is this: This will only work in a moral society that adheres to the Judeo-Christian principles as laid forth in the Bible.

Robert N. Sadler, M.D. 330 23rd Ave. North Nashville, TN 37203



John Donald Caldwell, age 71. Died October 20, 1990. Graduate of Vanderbilt University School of Medicine. Member of Lakeway Medical Society.

Bayard D. Goodge, age 82. Died November 3, 1990. Graduate of Loma Linda University School of Medicine. Member of Knoxville Academy of Medicine.

John H.L. Heintzelman, age 88. Died October 28, 1990. Graduate of University of Pittsburgh School of Medicine. Member of Knoxville Academy of Medicine.

Ralph Kling Jr., age 60. Died November 25, 1990. Graduate of Louisiana State University School of Medicine. Member of Nashville Academy of Medicine.

B.H. Webster, age 80. Died November 27, 1990. Graduate of Vanderbilt University School of Medicine. Member of Nashville Academy of Medicine.

new member

The Journal takes this opportunity to welcome these new members to the Tennessee Medical Association.

BLOUNT COUNTY MEDICAL SOCIETY James M. Thomason, M.D., Maryville

BRADLEY COUNTY MEDICAL SOCIETY Marlene Ann Catanese, M.D., Benton

COFFEE COUNTY MEDICAL SOCIETY Mark Roddy Russell, M.D., Tullahoma

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

John Henning Meriwether, M.D., Jackson Donald Allen Wilson, M.D., Jackson

CUMBERLAND COUNTY MEDICAL SOCIETY

Jon A. Simpson, M.D., Crossville

MAURY COUNTY MEDICAL SOCIETY

Karen Fisher Davis, M.D., Mt. Pleasant Thomas Wade Denney, M.D., Columbia Curtis Austin McGuyer, M.D., Columbia Rodney A. Poling, M.D., Columbia Charles Diller Wendt, M.D., Columbia

McMINN COUNTY MEDICAL SOCIETY

Chris L. Maynard, M.D., Athens

MONTGOMERY COUNTY MEDICAL SOCIETY

Herbert Rowland Cole, M.D., Clarksville Mark A. Sauer, M.D., Clarksville

NORTHWEST TENNESSEE ACADEMY OF MEDICINE

James Hardy Wolfe, M.D., Dyersburg

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

Henry Gupton, M.D., Oak Ridge

RUTHERFORD COUNTY/STONES RIVER ACADEMY OF MEDICINE

Jay B. Pennington, M.D., Murfreesboro Carl A. Swafford Jr., M.D., Murfreesboro

SCOTT COUNTY MEDICAL SOCIETY

Sven Olof Spjuth, M.D., Oneida

SULLIVAN COUNTY MEDICAL SOCIETY

Robert D. McKay, M.D., Bristol William Marshall Platt, M.D., Kingsport Divyang J. Trivedi, M.D., Kingsport William Strickland Weir, M.D., Bristol Timothy Michael Williams, M.D., Kingsport

SUMNER COUNTY MEDICAL SOCIETY

Scott McCuskey, M.D., Hendersonville James Edwards Roth, M.D., Hendersonville Ronald T. Zellem, M.D., Madison

WASHINGTON-UNICOI-JOHNSON COUNTY MEDICAL ASSOCIATION

David F. Moulton II, M.D., Johnson City Terri W. Seidel, M.D., Johnson City

personal news

Veena Anand, M.D., Hohenwald, has been named a Fellow of the American Academy of Family Physicians.

John J. Costanzi, M.D., Knoxville, has been elected president of the Southern Association for Oncology, an organization associated with the Southern Medical Association.

James A. Greene, M.D., Knoxville, has been chosen to serve as a special consultant for the board of directors of the American Geriatrics Society.

Charles W. White, M.D., Lexington, has been selected the 1990 Tennessee Family Physician of the Year by the Tennessee Academy of Family Physicians.

The following TMA members have been named Fellows of the American College of Surgeons: *Paul McCombs, M.D.*, Nashville, *Phillip Porch II, M.D.*, Nashville, and *Robert E. Walker, M.D.*, Oak Ridge.

TMA Members Receive AMA Physician's Recognition Award

The following TMA members qualified for the AMA Physician's Recognition Award during October 1990. This list, supplied by the AMA, does not include members who reside in other states.

Physicians can receive the PRA certificate valid for one, two, or three years. For the one-year award, physicians report 50 hours of continuing medical education, including 20 hours of Category 1; for the two-year award, physicians report 100 hours of CME, including 40 hours of Category 1; for the three-year award, physicians report 150 hours of CME, 60 of which are Category 1.

Ronald B. Addlestone, M.D., Nashville Deborah R. Doyle, M.D., Nashville Thomas C. Duncan, M.D., Nashville Deborah D. German, M.D., Nashville Johnny E. Gore, M.D., Antioch Conrad L. Grabeel, M.D., Knoxville John R. Holancin, M.D., McKenzie Robert L. Jackson, M.D., Memphis Hytham A. Kadrie, M.D., Chattanooga Joe R. Krisle, M.D., Memphis Thomas Little, M.D., Chattanooga Douglas P. Mitchell, M.D., Nashville Frances K. Patterson, M.D., Knoxville Carol A. Phillips, M.D., Memphis Jack C. Sanford, Jr., M.D., Memphis Alvin D. Shelton, M.D., Johnson City William D. Smith, M.D., Bristol

announcements

CALENDAR OF MEETINGS

NATIONAL

Feb. 8-10	American Society for Gastrointestinal Endos- copy National Interim Postgraduate Course—
	Hotel Del Coronado, San Diego
Feb. 14-16	Controversies in the Care of Dying Patients
	(sponsored by the Univ of Florida College of
	Med, Society for Health and Human Values,
	and the AMA)—Orlando
Feb. 16-18	American Association for Geriatric Psychiatry—Marriott Marina Hotel, Ft.
	Psychiatry—Marriott Marina Hotel, Ft.
E 1 00 00	Lauderdale
Feb. 20-22	American Venous Forum—Marriott Marina
Feb. 20-24	Hotel, Ft. Lauderdale
reb. 20-24	Medical Society of the Pan-American Doctors' Club—Hotel Fiesta Mexicana,
	Manzanillo, Mex.
Feb. 21-24	American Society of Addiction Medicine—
100. 21 24	Stanford Court Hotel, San Francisco
Feb. 24-27	American Institute of Ultrasound in
100.2.2,	Medicine—Marriott Marquis, Atlanta
March 1-6	American Academy of Allergy and Immunol-
	ogy—Hilton, San Francisco
March 3-7	American College of Cardiology—Atlanta
March 6-9	Association for Academic Psychiatry—Hyatt
	Regency Westshore, Tampa, Fla.
March 7-9	American College of Legal Medicine—Wes-
	tin Canal Place Hotel, New Orleans
March 7-12	American Academy of Orthopaedic Sur-
	geons—Anaheim, Calif.
March 8-12	Congress of the International Anesthesia Re-
	search Society—Marriott Rivercenter Hotel,
March 12-17	San Antonio, Tex. American Medical Student Association—
Maich 12-17	Hyatt, Kansas City, Mo.
March 13-15	American Society for Clinical Pharmacology
	and Therapeutics—Marriott Rivercenter
	Hotel, San Antonio, Tex.
March 13-17	American Society for Dermatologic
	Surgery—Hilton at Walt Disney World, Or-
	lando
March 14-16	American Psychosomatic Society-Hilton,
	Santa Fe, N.M.
March 14-17	Society for Adolescent Medicine—Marriott
M 15 17	City Center Hotel, Denver
March 15-17	American College of Preventive Medicine— Stouffer Harbor Place, Baltimore
March 16-22	United States and Canadian Academy of
March 10-22	Pathology—Hyatt Regency, Chicago
March 17-22	American Medical Tennis Association—Tuc-
	son Racquet Club, Tucson
March 17-22	Association of University Radiologists—Hil-
	ton at Walt Disney World, Orlando
March 22-24	International College of Surgeons—US Sec-
	tion—Williamsburg, Va.
March 24-27	Society of Surgical Oncology—Hilton at
	Walt Disney World, Orlando
	CTATE
	STATE

STATE

Feb. 22-24 Tennessee Society of Anesthesiologists, Annual Meeting—Stouffer Hotel, Nashville

Highlights of the TMA Board of Trustees Meeting

October 14, 1990

The following is a summary of the major actions taken by the Board of Trustees of the Tennessee Medical Association at its regular fourth quarter meeting in Nashville, October 14, 1990.

THE	BO	AR	D:

Impaired Physician Peer Review Committee Received a report from the Chairman of the TMA Impaired Physician Peer Review Committee regarding the Impaired Physician Program's long range plan.

Task Force on Study of Board of Medical Examiners

Received a report from Task Force Chairman Dr. Duane Budd, as called for in Resolution No. 19-90. The Board adopted a policy of inviting the president of the Board of Medical Examiners to report annually at the April meeting of the TMA House of Delegates. The Board also endorsed the recommendations of the Task Force to amend the Medical Practice Act.

Drug Testing Study Resolution No. 15-90 Deferred until January taking further action in regard to TMA Resolution No. 15-90 on Drug Testing Policy.

TMA CARE Program

Received a report from the Communications and Public Service Committee on implementation of the TMA CARE Program. The program has so far developed radio public service announcements, a patient relations direct mail campaign, a TMA news video, a program for the identification and training of physicians as spokespersons, and solicitations for an annual community service award.

Membership Campaign

Received a report on the progress of a membership recruitment/retention campaign.

Committee on Continuing Medical Education Approved a recommendation of the Committee on Continuing Medical Education for TMA to serve as a catalyst to pull together other organizations around the state in the development of a statewide CME consortium to study the concept of Focused CME. Also approved a Committee recommendation to establish an annual accreditation fee for those hospitals seeking TMA accreditation of their CME programs.

Tennessee Medicare Access Program

Received a status report on the Tennessee Medicare Access Program. To date the program includes 1,285 physicians who have signed up for the program and covers over 7,000 patients.

Air Pollution Control Board

Nominated Dr. Deborah R. Deason, Nashville, to the State Air Pollution Control Board.

Medical Laboratory Board

Nominated Drs. Jerome Abramson, Chattanooga, Dean G. Taylor, Nashville, and Phillip G. Pollock, Chattanooga, for consideration as members of the Medical Laboratory Board. Also nominated to a non-pathologist position Drs. Robert Alford, Nashville, Larry C. Brakebill, Knoxville, and R. Gary Samples, Cookeville.

Health Facility Penalties Board

Nominated Dr. John D. Lay, Savannah, to the Health Facility Penalties Board.

Board of Dieticians/Nutritionists

Nominated Diane Killebrew, Frances Jones, Dr. R. Wayne Luther, Memphis, and Dr. Les Hargrove, Knoxville, to the Board of Dieticians/Nutritionists.

Medical Laboratory Board

Nominated Dr. M. Douglas Leahy, Knoxville, to the Medical Laboratory Board Task Force on CLIA.

Joint Sponsorship of CME

Approved the establishment of an annual fee schedule for those medical specialty societies and other organizations requesting TMA joint sponsorship with Category 1 continuing medical education activities.

1991 TMA Committee Appointments

Reviewed a list of all current TMA committee members and those whose terms expire in April 1991.

Proposed 1991 Budget

Reviewed a draft proposal for the 1991 TMA budget.

New Headquarters Building

Received for information a progress report on construction of the new TMA Head-quarters building. Completion is projected for January 1991.



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Theocritus, 230 B.C.



Morgan E. Scott, M.D.



Neil P. Dubner, M.D.



Arthur E. Kelley, M.D.



Basil E. Roebuck, M.D.



Don L. Weston, M.D.



Orren LeRoyce Royal, M.D.



G. Paul Hlusko, M.D.



D. Wilfred Abse, M.D.



Ronald L. Myers, M.D.



Hal G. Gillespie, M.D.

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IMPACT Members—1990

As Chairman of the Board if IMPACT (Independent Medicine's Political Action Committee-Tennessee), I am pleased to present the following list of IMPACT members for 1990 as of November 15. Almost 1,300 TMA members have recognized the importance of united participation in the political process by contributing to IMPACT this year. This represents approximately 20% of the total TMA membership. To those of you whose names are included on the list below, please accept my sincere thanks.

You can be assured that legislators do pay attention to those who help them get elected and stay in office. To the extent that organized medicine is successful in working with the members of the 97th General Assembly, those of you who are IMPACT contributors will be due a great deal of the credit for that success.

If you do not find your name on this list, our records do not reflect that you were a member of IMPACT for 1990. Memberships are now being accepted for 1991. Annual dues are \$150 for sustaining membership. TMA's future legislative success depends on our continued participation in the political process. Your contribution will be much appreciated and will be put to good use.

> David G. Gerkin, M.D. Chairman **IMPACT Board of Directors**

GOVERNORS' CLUB MEMBERS

The individuals listed below elected in 1990 to go above and beyond the call of duty in their support of IMPACT and the political action efforts of Tennessee medicine. They are the 1990 members of the "Governors' Club," which requires a \$500 annual commitment to IMPACT. In this list you will find most of the members of the TMA Board of Trustees and the Committee on Legislation. These leaders of your Association know firsthand the stakes involved in our political advocacy efforts and the large role IMPACT plays in maintaining the independence of our profession. To them go our special thanks for a job well done.

ALLEN, CHAS EDWARD AMONETTE, REX ALLEN AVERY, JAMES KELLEY AVERY, ROBERT BRUCE BAILEY, ALLAN H BALLARD, THOS K BLACKWELL, CAROLYN FISER BOWERS, ROBT EUGENE BOZEMAN, CHARLES H II BRADSHAW, JAMES C JR CHESNEY, JOHN TUCKER CRAIG, JAMES THOMAS JR CROWDER, VIRGIL HOLT JR EASON, HAMEL BOWEN EDMONSON, ALLEN S

FERGUSON, JERE W FLEMING, JAMES CHRISTIAN FREEMAN, JERRE MINOR GERKIN, DAVID GEORGE GLUCK, FRANCIS W JR GODWIN, CHAS WAYNE GREMILLION, DANIEL E JR HERRING, ROBERT WILLIAM JR JOHNSON, CALVIN JOHN JOHNSON, H KENNETH II JOHNSTON, WILLIAM D KIRKPATRICK, ROBT DEAN LEVITCH, MELVYN ABRAHAM MCCALLUM, OSCAR M MILEK, MICHAEL A

MILLER, MICHAEL M MITCHELL, HAYS PEDIGO, THURMAN LEE PENNY, RICHARD M PRICE, JAMES ALFRED JR QUARLES, WILL G JR RODNEY, WILLIAM M ROYAL, JAMES RICHARD SALYER, HOWARD LEE SHOEMAKER, KENNETH E THOMISON, JOHN B WESLEY, RALPH E WHITE, CHARLES WESLEY WILLOUGHBY, JOS LEEPER WOOD, WILLIAM G

ADAMS, ROBERT L ADAMS, ROBERT RALPH ADAMS, LINAS J ADCOCK, FRANK JOHN III ADKINS, ROBT BENTON AGEE, OLIVER KING AGUIRRE, DENNIS MANUAL AHLER, ALBERT JULIAN AKIN, HOBART E AKIN, GORDON CLAY AL-ABDULLA, ABDUL-SAHIB M ALBRITTON, JOHN THOS ALEXANDER, CLYDE VINSON ALFORD, WILLIAM C JR ALFORD, ROBERT H ALGEE, WYATT R JR ALI, SUBHI DAWUD ALLEN, JAMES LESTER ALLEN, VERNE ELWOOD ALLEN, L DIANNE ALLEN, BILLY JASON ALLEY, EDMOND LYNN ALLISON, JACK R ALPER, CHAS H

AMBROSE, PAUL SEABROOK

AMBROSIA, JOHN M ANAND, VEENA ANAND, VIRENDER ANDERSON, ALLEN F ANDERSON, MARK D ANDREWS, DOUGLAS EUGENE ANTONUCCI, RICHARD A ARCHIE, DAVID S ARKIN, CHAS RICHARD ARNOLD, EDWARD STANLEY ARNOLD, IRA L ARNOLD, FREDRICK S ARNOLD, HENRY GRADY JR ARONOFF, PHILIP MELVIN ATKINS, JERRY FRANKLIN ATWOOD, SUE C ATWOOD, JOHN WESLEY AVERETT, STEPHEN L

BACKUS, ELIZABETH MAUREEN BACON, STUART PETER BAER, HARRY BAGBY, RICHARD A JR BAILEY, JOSEPH C BAKER, RICHARD DUDLEY

BALES, DONALD W BALL, CHARLES A BALLINGTON, KAREN LOUISE BANKS, SAML LOUIS
BARD, RALPH M
BARHAM, HARVEY HAYWOOD
BARNARD, VAUGHN N JR
BARNES, DAVID R BARNES, JAMES WALTER JR BARNES, ROBERT L III BARNES, SAM TAYLOR BARNETT, ROBT BURTON BARRON, FREDDIE T BASKIN, REED CARL BATTLE, GAY KIRCHNER BAYLOSIS, ROBERTO B BEALE, HOBART H BEALL, HUBART H
BEAMER, WILSON C
BEARD, MARVIN ROBISON
BEASLEY, JIMMIE L
BEATY, JAMES HAROLD JR
BEAZLEY, WILLIAM COOPER
BECKLARD, DOLLAGE BECHARD, DOUGLAS L BECHTEL, JACK T JR BECK, LARSON DALE

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BYRD, JACK BYRNES, JOHN M

CALCOTE, CLAUDE MCGHEE CALDWELL, GARY BLAINE
CALDWELL, EDWARD PRICHARD
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COX, LARRY H
COX, MICHAEL THOMAS
COX, CHARLES BOGGESS
COX, SUE CLARKE
COX, JOHN MICHAEL
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CRAWFORD, JOHN D
CREUTZINGER, DAVID J
CRITZ, GEORGE THEODORE
CROCKER, EDWARD F
CROWN, LOREN ARTHUR
CRUTCHFIELD, JAMES DONALD
CUNNINGHAM, ELBERT C
CUNNINGHAM, ELBERT C
CUNNINGHAM, EDWIN DAYTON
CUPP, HORACE BALLARD JR
CURLE, RAY EUGENE
CURLIN, JOHN PASCHAL
CURREY, THOS ARTHUR
CURREY, THOS ARTHUR
CURREY, THOS H
CURTIS, THOS H
CURTIS, TRANDALL

DAKE, THOS SCOTT DALTON, JOHN CHARLES DANIEL, ESLICK EWING DARLING, CHAS ELLETT JR DASH, LAMARR A DAVIS, THOS JOEL JR DAVIS, WILLIAM GRAY DAVIS, JIMMY B DAWOUD, SAMIR RIAD DAY, GEORGE LOUIS DEAL, VIRGIL T DEATHERAGE, PHILIP M DEBERRY, JAMES T DEDICK, PAUL DELVALLE, RENE CARLOS DEPERSIO, JOHN E DERRYBERRY, JOHN S DESOUZA, WM CELESTINO DEWITT, JAN ALLEN DICKERSON, DANL LAWRENCE DIEZ d'AUX, ROBERT C DIRMEYER, PHILLIP HAYS DITTES, ALBERT G DITTUS, JANET L
DOANE, DAVID G
DODD, ROBERT T
DODD, DAVID T
DODSON, THOMAS WILLIAM
DOELL, ROBERT J DOMINGUEZ, NOEL R DONAHUE, DAVID J DONNELL, JAMES HAROLD DORIAN, JOHN BERNARD DORROH, CHARLES WILLIAM DORSEY, LARRY DOSSETT, BURGIN E JR DOWNEY, WILLIAM LEE DRAKE, ARNOLD MANNAS DRAKE, JAMES ROBT DRESSLER, STANLEY JAY DRINNEN, DANL BROOKS DRIVER, CLARENCE DUDLEY, B STEPHEN DUDNEY, ELIJAH MORGAN DUER, CARL THOS DUFFY, MARY BROCK DUFFY, KAREN BARR DUGAN, PHILIP JERALD DUKE, ROGER DUNAVANT, ROBT WAYNE DUNCAN, JERALD MARK DUNCAN, RAPHAEL H JR DUNCAN, THOS RAY

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FURR, FRED M FUTRELL, DANNY W

FLICKINGER, TED LAWRENCE
FLYNN, JOHN
FLYNN, JOHN
FORG, TERRY
FORD, DENNIS CLIFFORD
FORD, AUGUSTUS C
FORD, AUGUSTUS C
FORD, DIANNE J
FOSTER, NELSON RAY
FOSTER, JERRY M
FOSTER, CHAS STEPHEN
FRANCIS, ROBERT STANLEY
FRANCIS, ROBERT STANLEY
FRANKLIN, JOHN DAVID
FRANKLIN, JOHN DAVID
FRANKLIN, SELMON T III
FREEMAN, COY
FREEMAN, MARK PEARCE
FREEMAN, GORDON
FREEMAN, MARK PEARCE
FREEMAN, GORDON
FREEMAN, HARRY
FRIST, JOHN C JR
FROST, CHAS LESTER
FROST, CHAS LESTER
FROST, CHAS STEPHEN
FRANCIS, ROBERT STANLEY
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FRANKLIN, JOHN DAVID
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FRANKLIN, JOHN DAVID
FRANKLIN, JOHN DAVID
FREEMAN, COY
FRANKLIN, SELMON T III
HAMILTON, RALPH S
FREEMAN, COY
FREEMAN, MARK PEARCE
HANES, THOMAS EUGENE
HUMPHREY, TOM NEAL
HUMPHREY, STEPHEN P
FREEMAN, GORDON
HANNA, WAHLD T
FREEMAN, HARRY
HAREN, VINCENT JAMES
HUMPHREY, WE MERRITT
FRIEDMAN, HARRY
HAREN, VINCENT JAMES
HUNT, NOEL CLARENCE
HUNT, NOEL CLARENCE
FROST, CHAS LESTER
HARRINGTON, ROBT LEE
HUNT, JOE
HUNTCHERSON, WM POWELL
HUTCHESON, ROBT HENRY

DUNDON, MARY CATHERINE
DURHAM, BEATRICE L

GAGILARIN, NARTY P
EASTERHY, JAMES F JR
GALLLARD, THADDEUS B
GALLARD, THADDEUS B
GALLLARD, THADDEUS B
GALLARLARD, THADDEUS B
GALLARD, THADDEUS B
GALLARLARD, THADDEUS B
GALLARLAR, THADDEUS B
GARDER, LARRAR THADDEUS B
GARDER, LARRAR THAD
GARNET, THADDEUS B
GARRETT, GLARAB HARRIS, ARTHUR SALE HARVEY, HATHAWAY K HARWELL, WM BEASLEY JR HARWELL, CARL M JR HOUSE, BEN FRED
HOUSTON, MARK CLARENCE
HOWARD, ROBT G
HOWE, JOHN W
HOWELL, MARK ALLAN
HOWSER, JOHN PATTON
HUA, VIN-PAUL HUDDLESTON, CHAS IRVING HUDGINS, J CARMACK HUTCHERSON, WM POWELL HUTCHESON, ROBT HENRY JR

HUTCHINS, ROBT GORDON HYATT, HUGH CROCKETT HYDER, NAT EDENS JR HYMAN, STEVE A

ISHAM, CHARLES AUBREY IVEY, R DONATHAN IVEY, DONATHAN MILES

JABBOUR, C EUGENE JABBOUR, J T JACKSON, JAMES T JACKSON, JAMES I JACKSON, JOHN M JR JACKSON, STEPHEN W JACKSON, JAMES W JACOBS, G JACKSON JACOBS, JOHN C JR

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KILEDJIAN, VARTKES

LIU, CHUNG-YUEN

KILLEFFER, JOHN JACOB

KILLMAN, KATHRYN

KILLOYD, KENNETH MICHAEL

KILROY, ANTHONY WALDO

KIM, HO KYUN

KIM, STEPHEN

KINCAID, WM RALPH

KINCAID, WM RALPH

KING, T FRANKLIN

KING, JAMES D

KIRBY, CHARLES A

KIRBY, CHARLES A

KIRBY, CHARLES A

KIRBY, CHARLES A

KILDYD, KENNETH MICHAEL

METZGER, WM EDGAR

MEYER, ALVIN HENRY JR

MICHAL, MARY L

MICHAL, MARY L

MIDDLETON, AUGUSTUS L

MILLAM, WILLIAM M

MILFORD, LEE WATSON JR

MILLER, WILLIAM O

MILLER, WILLIAM O

MILLER, BRADLEY WILLIS

MILLER, BRADLEY WILLIS

MILLER, PHILIP G

KISTLER, GENE HAVILAND

KLEIN, KARL

KLIEFOTH, A BERNHARD III

LOY, WM ALLEN

MILLER, CARTER F JR

KLINE, GEO LITTON KNABB, JAMES KNICKERBOCKER, FRED RAY KNIGHT, JOSEPH C KNIGHT, WILLIAM H

JACKSON, JOHN M JR

KUYKENDALL, SAM J

KYGER, KENT

KYGER, CLOPE A JR

MAJEED, GERALD L

MAJEED, GERALD L

MANNER, MANN, JAMES ALAN

MANN, JAMES ALA

LOYD, JAMES ALAN LUBOW, LAWRENCE D LUCKMANN, KENNETH F
LYNCH, EVERETTE G LYNCH, EVERETTE G LYNCH, MICHAEL HARDY

KNIGHT, JUSEFR C
KNIGHT, WILLIAM H
KNOWLING, ROBT EDWARD
KRAUS, ALFRED PAUL
KRAUSE, RICHARD ALAN
KRICK, JOSEPH G
KRUEGER, SYLVIA LYNNE
KURITA, GEORGE I
KUTTY, I N
KUYKENDALL, SAM J
KYGER, KENT
KYLE, CLYDE A JR

MACDONALD, R SCOTT
MACHIN, JAMES ELLIOTT
MACHIN, JAMES ELLIOTT
MACHIN, JAMES JOS JR
MADDEN, JAMES JOS JR
MADEN, WILLIAM L
MAGGART, MICHAEL L
MAJEED, SHAHUL J
MANCEBO, GERALD L
MANNEDO, GERALD L
MANNI, VENK
MANNI, JAMES ALAN
MANNI, JAMES ALAN

MILLER, FRANK J
MILLIGAN, LESLIE
MILLIS, JAMES BROWN
MILNOR, JOHN PERVIS III
MITCHELL, DOUGLAS PARK
MITCHELL, FOY B
MITCHUM, ALBERT JACKSON
MOKAL, ALBERT JOSEPH
MOLONY, WILLIAM LAWRENCE
MONTANARO, LOUIS
MONTGOMERY, JOHN LEE JR
MONTGOMERY, TONY JOHNSON
MONTGOMERY, CHAS ALEXANDER
MONTGOMERY, ROBERT N
MOORE, KENNETH LYNN
MOORE, ROBERT SAYLOR
MOORE, JOHN T JR
MORENO, FRANCISCO G
MORGAN, STEVEN W
MORGAN, TOMMY E
MORGAN, TOMMY E
MORGAN, TOMMY E
MORRISY, LEE RICHARD
MORRISY, LEE RICHARD
MORRISY, LEE RICHARD
MORRIS, STEVEN ALLEN
MORRISON, LARRY BURT
MORTON, RALPH F
MOSS, JOHN PALMER
MOUNGER, EMERSON JAY
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MULLINS, W MICHAEL
MUMFORD, MARK S
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Manufacturing Homelessness: Producing Street People in a Small Town in Tennessee

DAN McMURRY

Preface

Our communities must enlarge the homeless dialogue if there is to be any progress in dealing with this massive problem of human misery and suffering. This dialogue must go beyond the continually repeated demand for "safe, decent, and affordable housing for the homeless." The assertion is that an ample supply of housing of this type would essentially end the homeless crisis. According to the evidence this is simply not true, and the sooner the public becomes aware that housing is far down the list of solutions to homelessness, the earlier the community can begin to realistically address the crisis.

See editorial comment in this issue.

What must be clearly articulated at the beginning of all conversations about the homeless crisis is that the majority of the homeless are unattached men—young, middle-aged, and old—who have little education and few job skills—with chaotic employment histories, who are severely handicapped by mental, emotional, and/or drug problems. What propelled these people into the streets and shelters and soup lines was not the sudden loss of job or lack of hous-

ing. Obviously, superficial job training programs and hurriedly created space in a rehabilitated motel or public housing will do exceedingly little to ease the crisis. Providing shelter space and survival services should be only the *first* item, not the last, on a caring community's agenda for their needy neighbors.

Introduction

Every community has always had its share of local citizens who wander rather aimlessly, living off the largess of their neighbors. This group has been augmented from time to time by a drifter or two. It is only these "traditional homeless" who are to be found in small towns and rural areas of Tennessee. Street people and other varieties of homeless are not, despite media claims to the contrary, ubiquitous.

Street people are sometimes called the "new homeless." Although the boundaries separating street people from other groups of the homeless are indistinct, by street people I mean that population of homeless persons who live in the "nooks and crannies" of the cities, sleeping in the open or in shelters, and getting their food by begging or in soup kitchens.

At least from the early days of this century, these rootless wanderers in Tennessee, as in much of the South, were alcoholics, usually called "bums" and "sots," or were mentally disadvantaged. A few, it has been reported, were romantics or dreamers, unable to bear the yoke of endless toil. Recall the nostalgic tales surrounding Dr. Ben Reitman and Woody Guthrie, and keep in mind that they were all men.

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There was not much difference at that time between the wandering men who were found in the cities and those who favored small towns and the countryside.

Today these men are called homeless, but in Tennessee they are, for the most part, only the same population as before, garbed in the lifestyle of the 1980s. In one of the early classic studies of sociology, these men were described as "ne'er-do-wells who are wholly or partially dependent and frequently delinquent as well."

The Rapid Increase in the Number of Homeless in Tennessee

Beginning around 1980 large cities in Tennessee started to see a rapid growth in a new population of dependent homeless, who became known as "the street people."2 By all accounts this burgeoning population, now including also women, adolescents, and single parents with children, is different from those they either blended with or displaced. Mental illness and mental deficiency have now displaced alcoholism as the distinguishing characteristic of homelessness. In a recent summary of the investigations of mental illness among the homeless, Redburn and Buss³ report a range of from 25% to 90%, with most studies finding about 40% of the homeless having an identifiable mental problem. What is unique about this large population is that it is concentrated in the big cities.

There are an estimated 1,500 street people in Nashville, population 462,000, but none in Murfreesboro, population 36,000 (25 miles away), nor in Clarksville, population 58,000 (40 miles from Nashville). There are 2,500 street people in Memphis, but none in nearby Jackson; many in Knoxville and Chattanooga, but none in Johnson City or Kingsport, both large towns. In fact, of the estimated 7,500 street people in Tennessee, all are found in the four metropolitan areas. There are 95 counties in Tennessee; street people are found in only four. There are 113 towns and cities in the state; street people are found in only four, and then only downtown in the central parts of those cities.

Certainly, the 91 counties where street people are not found have the same problems—poverty, unemployment, unwed motherhood, and mental and emotional illness—as the four counties where the street people are found. The smaller cities in the state are beset with the same problems as their metropolitan neighbors—albeit on a smaller scale. What appears to be the only significant difference between the areas with street people and those with none is

the availability of services for street survival.

The purported causes of homelessness appear to be as acute in small towns and rural areas as they are in metropolitan areas. Poverty is not as visible, but just as common, in small towns as in metropolitan areas. Lack of jobs, according to a recent state report⁴ the second most important cause of homelessness, is not confined to the metropolitan areas of Tennessee. Rural counties are plagued with the highest unemployment rates in the state, followed by the urban counties, with metropolitan districts having the lowest joblessness levels.⁵ If lack of jobs and poverty were sufficient to cause homelessness, rural counties and small towns would contain the largest populations by far.

Mental illness, alcoholism, unwed motherhood, domestic violence, unemployment—all listed as major factors forcing the unfortunates to the streets of large cities—are just as serious in small towns and rural communities in the state. What then accounts for the concentration of street people in the four large cities of the state, and only there?

Services and Street People: A Macroperspective

The availability of survival services such as shelters, soup kitchens, and medical clinics are necessary conditions of street existence. With the proliferation of these services, however, the possibility that an increase in services may serve to increase the number of homeless has now become part of the public debate. Lochhead⁶ has pointed to this potential negative aspect of unlimited services. "Providing free food and beds to the homeless has done little to end the problem," she reports, "and may only encourage and prolong it." What the services do, then, is to affect the number of street people in two ways.

First, survival services determine where the street people will congregate. Second, as the services offered and the numbers of street people increase to become a "critical mass," even more of the homeless are drawn into the network. For the past six years, as the street population of Nashville has fluctuated around 800, not only has the number of facilities offering services to the homeless increased rapidly, but the range of services has broadened, as well. The guide to these services published by the Coalition for the Homeless in 1985 was 36 pages long; it is now nearly 299 pages long, with a detailed index.^{7,8}

The relationship between the availability of shelters, the number of homeless, and the presence of street people in Tennessee's towns and cities is clear. If the poor and the mentally ill and the unemployed are to remain in their home locations outside the

metropolitan areas, they cannot be "street people" if there are no survival services available to them. Hometown is where friends and family are. Should the poor remain there, they are supported and encouraged. At least they remain off the streets. Is it, then, the availability of services in Nashville or Memphis or Knoxville or Chattanooga that draws the poor, the alcoholics, and the mentally ill, to live there on the streets? Or is it the loss of social support—job, wife, family, friends, neighborliness—that makes the small-town person vulnerable, a "potential homeless" person, so that migration to Nashville becomes the best mode of survival?

Services and Street People: A Microanalysis

Before Suzie was assigned to the Mid-Cumberland region as homeless coordinator, the West Main Mission in Murfreesboro served a number of functions for the local needy, and provided shelter for transients. It was a local effort, established by churches, charities, and volunteers to serve the local population. Soon after it began operating, the Mission was added to the list of local efforts that were recognized as helping agencies, and was funded by the neighborhood United Way.

West Main Street is "across the tracks" near the center of the town. As Murfreesboro grew, the better homes in the downtown area expanded along the ridge of high ground topped by East Main Street. East Main became the street of the leading families, and West Main the blue- and black-collar neighborhoods. The railroad, the creek, the bypass, and West Main Street all run parallel through the lowest, the poorest drained, and most flooded section of the city.

It was in this poor section of the city that the Mission was founded, and it was for these people that it served a variety of essential functions, functions that in earlier—and better—times had been naturally provided by neighbors. A needed coat or a mattress could be found at the Mission. In short, the Mission was a good friend, a friend indeed because it was most especially a friend in need.

The Mission Jumps the Tracks

Darwin's Market was the grocery store for a working class area just east of Broad Street, the bypass that separated the West Main Street neighborhood from the rest of the city. It was a locally owned neighborhood supermarket, but time and "progress"—the very same elements that changed West Main Street from a fully functioning neighborhood into a fragmented bunch of individuals moving frequently from house to house—"did in" the working

class district surrounding Darwin's. So Darwin's failed, too.

The Mission acquired the building that was Darwin's Market. The West Main Mission moved the four blocks to the corner of Front Street, out of the cramped quarters of what was once a restaurant, into the 6,000 square foot building that was once a thriving grocery store. The move came just in time, because homelessness was to become a major issue in communities across the country—Murfreesboro among them.

Volunteers worked hard to fix the old store into a suitable site for the many functions that the Mission had to perform. The main floor was modified to store and display used clothing and small household necessities for poor people to pick and choose from. The back part of the old store building proved an ideal site for conversion into two sleeping areas, one for women (or families) and the other for men.

The new sleeping quarters and storage rooms were not the only new additions. Along with the sizable increase in the budget, there was a new tide of volunteers, eager to serve in whatever ways they could. A flood of donations of all varieties flowed to the Mission. It began to appear as if the citizens of Murfreesboro were intent on burying the Mission under mountains of used clothing and stacks of household furnishings.

The Mission's Main Purpose: Shelter

Over the years the Mission had developed what seemed a proper response to the demand for shelter by the local needy and by transients. Men could stay in the shelter one night; families, which generally meant women and their children, three nights. Almost all of the people who used the shelter were transients; only rarely would a local wind up sleeping in the Mission, and that was invariably one of the three or four elderly alcoholics who had temporarily fallen out with their families.

Even after the flood of the homeless had swept across the country, changing large areas of the downtown district of most large cities into transient camps, Murfreesboro had no population of street people. The local needy were given whatever help the Mission could extend. The needy transients came and left.

Found: An Ideal Social Laboratory

The streets of Murfreesboro are being turned into an ideal social laboratory. I conducted a study in the spring of 1988 that included a careful survey of the agencies and the streets in Murfreesboro and surrounding towns. The needy in these communities had

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recourse to many helping agencies and support services. A directory of social services for the poor in the area was developed and published by the Department of Sociology, Anthropology, and Social Work at the university. It was a very hefty book.

Prior to the fall of 1988 there were neither services for street people, nor any street people, in any town in mid-state. If survival services were added before street people showed up in any of these communities, the causal relationship would be clear. The question that there is so much controversy about will subsequently be answered: Which comes first, services for street people or street people? The experiment was about to begin.

A Visit to the Mission

To get a description of the West Main Mission and its tasks in the fall before the winter demand for shelter by the transients began, and to establish a baseline for my research, I arranged to visit the mission and to interview the director.

I asked the director to tell me about the work of the Mission. He started with a jolting, "My clientele is fussy," and proceeded to relate a story of a woman who received some used toys in her Christmas package last year. She came back, he reported, verbally abused the volunteers who had cleaned and repaired the toys, threw the toys on the floor, and gave her story to the newspaper. "Because of the actions of that one woman," he said, "the entire system for giving toys to poor kids has been changed for the worse."

"If you give 'em all they want, it'll break somebody; why, it would even break a millionaire. That's why we don't do that anymore." This was in response to giving the "clients" food baskets, money to help with their electric and heating bills, meals whenever they want them, and so on.

The Mission at one time took domestic violence victims, but "we don't have that problem anymore," the director said.

I asked him if the people who stay at the Mission have access to parts of the building other than the places they sleep. "Oh, no! I can't have that," the director said, "I wouldn't have nothing left. In fact, when I'm taking these people around, I make sure the canned goods, like meat and stuff, are put up. Women especially, these women will take it and vroooom! it'll go right into their pocketbooks. It's just like a dollar bill to them."

The Mission's director's explanation of why Murfreesboro had no people living on the streets was straightforward. "You'll notice no homeless on the streets of Murfreesboro. Now I don't want to say anything about other towns, but we have worked awful hard to keep this town clean, neat, and straight. What we do with the transients is to feed 'em and get 'em gone. If we didn't, we would be covered up with 'em.'

"There are only about six homeless here; they are alcoholics or derelicts. All of 'em get government checks and one of 'em makes more money than I do."

The Experiment Continues: The Room in the Inn Begins

After deciding that she could get a "homeless program" accepted in Murfreesboro, Suzie moved quickly. She already had a group organized as the Rutherford County Coalition for the Homeless, consisting mainly of preachers and workers-paid and volunteers-from the helping agencies. This was a type of ready-made "caretaker industry." To energize this group she invited a Catholic priest from Nashville to speak to the fledgling Coalition. The priest has a special place among homeless advocates. Besides his long-time efforts on their behalf, he started the Room in the Inn program in Nashville. The program opens churches to the homeless on cold nights during the winter months. The priest's appearance in Murfreesboro and the talk he gave provided the group with the determination to push ahead with the program.

After a slow start in November (1988), the program was soon attracting an average of three or four "homeless" persons per night. During this period the West Main Mission went steadily about doing the tasks it had long performed for the community's needy and the few transients who showed up. During the entire month of December 1988, five persons stayed overnight in a mission that can sleep 15 each night, a mission stocked with food, and with baths and a kitchen designed specifically for the needy. Through aggressive "marketing," however, the Room in the Inn program was outbidding the Mission.

When the needy showed up at the Emergency Food Bank, or Red Cross, or Community Helpers, or the Welfare office, there were advertisements for the Room in the Inn asking, "Do you need a nice warm place to stay tonight free? Do you know anyone who does?" Social service workers told their clients about the program and "encouraged" them to tell others who might "need" the service. In fact, the announcements are plastered all over the county. I live in a small community nine miles from Murfreesboro. One evening last month I went to the little country store there to buy dog food and there on the front door was a Room in the Inn poster. The following

week I saw one on the brick wall just to the left of the steps leading into the Nashville Union Rescue Mission, "home" to 450 transient men, many looking for new horizons. Two men were leaning over, one hand on the wall, peering at the sign. Supply-side homelessness.

Considerations

In a uniquely insightful article, Marin⁹ divides the homeless into two groups, not so much by what they have or do not have, or by what caused them to become homeless, but whether they are seeking to *survive outside* the system, or *struggling to get back in*. The natural drive for the latter group is to "hold on," and if they slip, to get back up. "Bouncing back" has been as much a part of America's poor as beans and biscuits. And now, there is a fine-mesh safety net, very fine-mesh, giving those who slip an additional bounce. But a community's social support system has traditionally acted more like a trampoline than a safety net for the struggling poor. They slip and they bounce back. It's not perfect, but it works if it's allowed to.

The other group that Marin singles out—those seeking to survive outside the system—stagger over to the edge of the safety net and jump over. They are gathered up in the net; they search until they find another way out. The one group of "homeless" bounces back—if they are allowed to; the other group always wiggles free.

The Second Shoe

Unfortunately, Suzie, along with most other advocates, treats both groups exactly alike, or, as Rev. Carl Resener, director of the Nashville Union Rescue Mission, puts it, "they throw blankets and sandwiches at them," and in Suzie's case, cots as well. That approach is helpful for the escapists; it provides them with more and more of what they want. This is all they will allow the community to do for them.

It is deadly for the seekers, because these services do not satisfy their real needs; it postpones the possibility that they will struggle to fulfill those real needs. What they need is help *off* the streets, not services that allow them to languish there indefinitely.

The Hypothesis Is About To Be Answered

As I was coming back from getting a haircut yesterday, I saw a shabbily dressed young man who looked to be in his mid- to late-20s, shuffling up East Main past St. Paul's. Later, as I "drove through" at the bank up the block, I saw him walking very slowly up College Street. Coming back from the library, I saw him for the third time, sitting on the sidewalk in front of the First Baptist Church. Will a population of street people develop in Murfreesboro? We'll see.

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APRIL 1991							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	1	2	3	4	5	6	
7	8	9	10 11 12 13 TMA 156TH ANNUAL MEETING Peabody Hotel—Memphis				
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28	29	30	NOTES				

Cocaine-Related Deaths in Memphis and Shelby County Ten-Year History, 1980-1989

RICHARD C. HARRUFF, M.D., Ph.D.; A. MAURY PHILLIPS, B.S.; and G. SCOTT FERNANDEZ, B.S.

Introduction

In 1980 a 21-year-old Memphis woman died of accidental cocaine overdose. This was the first fatality investigated by Shelby County medical examiners in which the drug was detected. Since then, the number of deaths by all manners with body fluids testing positive for cocaine have risen tremendously—an experience repeated nationwide. In 1987 we reported the explosive appearance of cocaine in our medical examiner casework. In 1988 we emphasized the connection between cocaine and homicide. Now in 1990 we report a full ten-year experience with the cocaine epidemic.

Methods and Materials

Drug Screening Procedures and Toxicology Methods. Over the period of this study, all deaths in Memphis and Shelby County resulting from violence, accidents, suspicious or unnatural means, as well as those medically unattended, were referred to Shelby County Medical Examiner's Office. Regardless of whether or not there was an autopsy on the body, toxicologic analyses were performed on blood, urine, and often vitreous humor for most deaths under the age of 60 years, for all deaths resulting from trauma, and for suspected unnatural deaths. In addition, ethyl alcohol concentrations were determined in urine and blood by a headspace gas chromatographic method.

Urine was screened for drugs by the Enzyme Multiplied Immunoassay Technique (EMIT) using reagents obtained from Syva, at a lower sensitivity level of 300 µg/L. Urine was also extracted for thin-

layer chromatography with chloroform/isopropanol (4:1) after buffering to pH 9.3. Cocaine and its metabolites, as well as other drugs, were visualized on the chromatogram by spraying with acidified iodoplatinate.

If urine from a case was positive, or if there was no urine, then blood was screened by first extracting for acidic and neutral drugs and performing thinlayer chromatography as described for urine. In addition, blood was extracted with n-butyl chloride for basic compounds. This concentrated extract was injected into a gas chromatograph with a 2-m SP-2100 packed column and flame ionization detector. For further identification, the extract was chromatographed on a 15-m DB-1 capillary column, and observed retention indices were compared with library data. Final confirmation of drug or metabolite was established by gas chromatography/mass spectrometry (GC/MS). Concentrations of cocaine in blood samples found positive on drug screen were measured by gas chromatography using an internal standard on a 15-m DB-5 capillary column equipped with flame ionization detector. The sensitivity of this method for cocaine was 50 µg/L (165 nmol/L).

Benzoylecgonine concentrations were determined for suspected cocaine overdose deaths, particularly those with little or no cocaine present in blood. Because of benzoylecgonine's amphoteric property, extraction and chromatographic techniques were modified for identification and quantitation.³ Benzoylecgonine-d₃ (BE-d₃) was added as an internal standard to samples, concentration standards, controls, and blanks before extracting with chloroform/isopropanol (3:1) and salting out with NaCl. The organic layer was evaporated and the residue derivatized with N,N-dimethylformamide dipropylacetal. After derivatization, the residue was dissolved in n-butyl chloride. This solvent was

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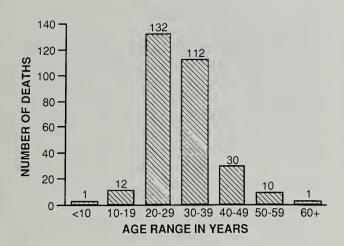


Figure 1. Age distribution of cocaine-positive fatalities from Shelby County Medical Examiner's Office during the years 1980-1989.

180 163 160 WHITES NUMBER OF DEATHS 140 BLACKS 141 120 100 80 60 40 31 20 ACCIDENT HOMICIDE SUICIDE MANNER OF DEATH

Figure 2. Distribution of cocaine-positive fatalities according to manner of death for both races.

evaporated and the final residue reconstituted with 50 µl of chloroform for GC/MS with selected ion monitoring using a 15-m DB-1 capillary column. The starting oven temperature was 210°, programmed at 10° per minute to a final temperature of 240°C. The ions selected for monitoring the internal standard, BE-d₃, were 213.10, 229.10, and 334.20 m/e. The ions monitored for benzoylecgonine were 210.10, 226.10, and 331.20 m/e. Sensitivity levels of 50 ng of benzoylecgonine from 1.0 ml blood samples were achieved routinely with this technique.

Review of Records. Computer records of Shelby County Medical Examiner's Office were searched for all cases with cocaine detected in postmortem body fluids for the inclusive years 1980 through 1989. For each record identified, age, race, sex, manner of death, and cause of death were tabulated from medical examiner reports. From toxicology reports, the following were compiled: blood cocaine concentration; presence of cocaine in urine or other fluids; presence of cocaine metabolites, ecgonine methyl ester, ethylbenzoylecgonine, or benzoylecgonine; blood ethanol concentration; and identity of other drugs detected.

For drug overdose deaths, details from medical examiner reports were abstracted to classify each case according to witnessed circumstances of death into one of the following four groups: subject was found dead, subject passed out or collapsed before dying, subject displayed manic behavior or hyperexcitation prior to death, or subject developed seizures leading to death.

Results

From 1980 to 1989 inclusive 299 deaths were investigated by Shelby County medical examiners in

which one or more body fluids were found to contain cocaine. In 162 cases (54%) the drug was detected in blood; in the remainder, the blood was negative but urine or another body fluid contained cocaine or its metabolites. For descriptive purposes, the terms "cocaine-positive" and "cocaine-related" both refer to cases in this study with either cocaine or its metabolites detected in any body fluid.

Age, Race, and Sex. The age distribution of fatalities is shown in Fig. 1. The youngest was a 9-month-old black boy who died of acute epidural hemorrhage after falling from a bed, and the oldest was a 77-year-old white woman who sustained multiple injuries as a driver in a motor vehicle accident. In neither case was the source of cocaine discovered. The ages of all fatalities, excluding one in which age was unspecified, averaged 31 years; the most common age was 25 years. Fatalities distributed according to race and sex showed black men 63%, white men 22%, black women 9%, and white women 6%. One patient was an oriental man. For comparison, in the 1980 census Shelby County's population was distributed by race as 58% white and 42% black.

Manner of Death. Fig. 2 shows the distribution of fatalities with respect to manner of death, and Fig. 3 shows the number of deaths by each manner at yearly intervals from 1980 to 1989. Blacks accounted for 87% of all homicides, 90% of all natural deaths, and 53% of all accidental deaths. Whites accounted for 74% of all suicides. Altogether, 55% of the fatalities were homicides, 24% were accidents, 10% were natural deaths, and 10% were suicides.

Homicides. Fig. 4 shows the homicide rate in Shelby County from 1980 to 1989, with the number of cocaine-positive homicides superimposed. During the ten-year period, 10% of all homicides were

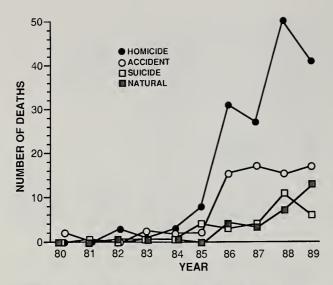


Figure 3. Yearly cocaine-positive mortality rates for each manner of death

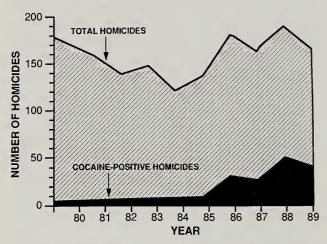


Figure 4. Homicide rates in Memphis and Shelby County from 1980-1989. Cocaine-positive homicides are shown superimposed.

cocaine-positive. In the latter part of the decade, the percentage of cocaine-positive homicides increased. In 1985, 6% of all homicides were cocaine-positive; in 1986, the percentage was 17%; in 1988, 27%; and in 1989, 25%. The cause of death in 82% of homicides was gunshot wound(s); stabbings were the cause of 13%, beatings of 4%, and strangulation and fall of one case each.

Accidental Deaths. There were three categories of accidental deaths: drug abuse, motor vehicle accidents, and miscellaneous accidents. Overdose of drugs, with or without alcohol, and intravenous drug abuse were responsible for 49% of all accidental deaths. One was due to acute ethanolism (blood alcohol concentration = 840 mg/dl), and two were from complications of chronic intravenous drug

abuse. The overdose cases are examined further in a separate section below.

Motor vehicle injuries caused 32% of accidental deaths. In the group of motor vehicle deaths, 65% were drivers, 17% were passengers, and 13% were pedestrians. The cause of the rest was unknown. Blood ethyl alcohol concentration was greater than 50 mg/dl in 57% of all motor vehicle deaths and greater than 100 mg/dl in 47% of fatalities among those who were drivers. Cocaine-positive motor vehicle fatalities represented 5% or less of all traffic deaths during any single year.

Other accidental fatalities, accounting for 19% of the deaths in this manner, were grouped as miscellaneous. These included drowning (2), electrocution (1), falls (2), fire-related (2), gunshot wound (1), accidental hanging during a period of manic behavior (1), systemic hyperthermia due to environmental conditions in addition to cocaine intoxication (1), systemic hypothermia due to exposure (1), insulin shock (1), and traumatic asphyxia (1). One other was caused by acute subdural hematoma from head injury of uncertain origin. In 42% ethyl alcohol was present in blood, and in 21% the blood alcohol concentration was greater than 100 mg/dl. Two cases, the electrocution and the traumatic asphyxia, were work-related.

Suicides. Gunshot wounds caused 61% of all suicides. Hangings and drug overdoses caused 16% each. Carbon monoxide poisoning was responsible for one case, and another individual committed suicide by a combination of cutting his wrist and drowning in a filled bathtub. White men represented 68% of all suicides, black men 16%, black women 10%, and white women 6%.

Natural Deaths. There were 30 cases of natural death, 80% due to either atherosclerotic or hypertensive cardiovascular disease. Other causes were intracranial hemorrhage (2), asthma (2), chronic renal failure (1), and sarcoidosis (1). The average age was 40 years, ranging from a 24-year-old asthmatic white woman to a 56-year-old black man with ischemic heart disease; 83% of the subjects were men.

Drug Overdoses. Including both accidental deaths and suicides, there were 38 fatalities caused directly by drug overdoses. These cases were distributed according to sex, race, and manner as follows: black men 34% (all accidents), black women 13% (three accidents, two suicides), white men 34% (ten accidents, three suicides), and white women 18% (all accidents).

Blood levels of cocaine are shown in Table 1, grouped according to circumstances associated with the deaths. Cocaine alone was responsible for 79% of

TABLE 1

DRUG OVERDOSES WITH COCAINE ALONE OR COMBINED WITH OTHER DRUGS, ACCORDING TO COCAINE LEVELS IN **BLOOD AND CIRCUMSTANCES OF DEATH**

Age (yrs)	Sex/Race	Cocaine mg/L blood*
Found Dead		
44	M/B	0 ^
24	M/W	0в
22	M/W	0 c
29	M/B	0 ^D
33	M/B	0 ^E
24	F/B	.05
31	M/W	.13 ^F
42	F/W	.14 ^G
34	F/B	.14
31	M/W	.47
21	F/W	.70
35	M/W	1.10 ^H
32	M/W	1.10
44	M/W	1.10
28	F/W	1.40
36	M/W	2.01
26	M/W	5.401
Passed Out or Collapsed		
33	F/B	01
34	M/B	0 ×
40	F/W	0 r
27	M/B	.24
36	M/W	.30™
35	M/B	.50
50	M/B	.90
34	M/B	1.00
36	M/W	12.00
Hyperexcitation		
28	M/W	.05 ∾
31	M/B	.20
35	M/B	1.00
40	M/B	1.30°
38	F/W	8.10
16	F/B	8.30
Seizures		00.0
22	F/W	.06°
19	M/B	.26
30	F/W	6.80
28	M/B	11.10
25	F/B	18.30
26	M/W	207.90
Notes		

Notes

- A. Polydrug overdose—heroin, ethyl alcohol B. Polydrug overdose—morphine, ethyl alcohol
- Amitriptyline overdose
- Blood benzoylecognine 1.5 mg/L
- E. Blood benzoylecognine 0.11 mg/L
- Low levels diazepam and ephedrine present
- G. Polydrug overdose—phentermine
- H. Cocaine concentration in vitreous
- Low levels amoxapine and methadone present
- Diphenhydramine overdose
- K. Polydrug overdose-morphine
- L. Delayed death
- M. Propoxyphene overdose
- N. Polydrug overdose-phentermine
- O. Low levels tripelennamine and pentazocine present
- P. Cocaine concentration in vitreous

overdose deaths; three had low levels of other drugs also present. Polydrug overdoses with cocaine in combination with another drug contributed 16%. A drug other than cocaine, but with cocaine also present, accounted for three deaths.

Regarding circumstances surrounding the deaths, 17 victims were found dead; thus, the mechanisms of their deaths were unknown. Witnesses saw nine subjects pass out or collapse before they died. Episodes of manic behavior or hyperexcitation were witnessed in six cases, and seizures were reported to precede another six deaths. In the 26 cases either found dead or witnessed to pass out or collapse, seven deaths were caused by polydrug overdoses or by a drug other than cocaine with cocaine present only as an incidental finding. In 12 cases that had either behavioral hyperexcitation or seizures, only one was a polydrug overdose-phentermine combined with cocaine; all the rest were due to cocaine. The extremely high level (208 mg/L) was from a man who lost consciousness with his head in a plastic garbage bag containing cocaine and apparently inhaled or ingested vast quantities of the powder.

In Fig. 5, percentages of deaths by all manners and causes are presented according to cocaine concentrations measured in blood. According to these data, 72% of all deaths had blood levels less than or equal to 0.1 mg/L, and only 6% had blood levels greater than 1.0 mg/L. Fig. 5 also shows percentages of cases dying of drug overdoses at each concentration range of cocaine. Of all fatalities with blood cocaine in the range 0.1 to 1.0 mg/L, 20% were overdoses; in the range 1.0 to 10 mg/L, 64% died of overdoses. Above 10 mg/L, 100% of deaths investigated were overdoses.

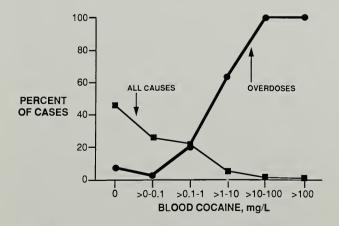


Figure 5. Toxicity of cocaine. The thinner line joining squares shows the percent of all deaths by all causes that had blood cocaine levels as indicated along the x-axis. The heavier line joining circles shows percentage of cases dying of overdoses, at each concentration range.

^{*}Cases with 0 mg/L cocaine in blood had cocaine present in another body fluid, usually urine.

TABLE 2

BLOOD LEVELS OF COCAINE CORRELATED WITH
LEVELS OF COCAINE IN VITREOUS AND BILE AND WITH
BENZOYLECGONINE (BE) IN BLOOD IN 27 CASES*

Blood Cocaine mg/L	Blood BE mg/L	Vitreous Cocaine mg/L	Bile Cocaine mg/L
0	<u>=</u>	.10	_
0	_	1.10	_
0	.48	_	_
0	_	.04	_
0	_	.05	_
0	.03	.05	.11
0	1.20	_	_
0	1.50	.10	_
0	2.20	_	_
0	.11	_	_
.04	.23	_	_
.05	1.90	.06	=
.08	.91	_	_
.11	.29	_	
.13	1.88	.16	5.21
.14	_	.30	.67
.14	2.89	_	_
.20	.90	_	_
.20	1.30	_	_ _ _
.20	.60	_	_
.26	2.90	_	_
.30	2.81	_	_
.50	1.70	_	_
.88	1.06	_	_
1.10	_	1.20	_
2.01	1.36	_	_

^{*}The 27 cases consisted of 15 accidents, six homicides, two suicides, and four natural deaths.

Because cocaine is rapidly hydrolyzed to benzoylecgonine and other metabolites, concentrations of cocaine in vitreous humor or bile were measured in ten cases; benzoylecgonine concentrations in blood were determined for 20. These results are presented in Table 2. In all that had the determination, vitreous cocaine concentrations were greater than corresponding blood concentrations. The largest difference was in the case with no cocaine in blood and 1.10 mg/L in vitreous. Similarly, blood concentrations of benzoylecgonine were higher than cocaine's in all cases except one. In ten cases, the difference was greater than 1 mg/L, and in four cases, benzoylecgonine concentrations exceeded cocaine concentrations by more than 2 mg/L. Furthermore, in three cases in which cocaine concentrations were zero, benzoylecgonine levels were greater than 1 mg/L.

Association of Blood Alcohol Concentration with Manner of Death. Shown in Table 3 are percentages of deaths at different blood alcohol concentrations. In the group of 145 deaths with zero blood alcohol,

45% were victims of homicide. In those 154 with alcohol present, 64% died by homicide. In the subgroup of 84 fatalities whose blood alcohol concentrations exceeded 100 mg/dl, 70% were by homicide.

Discussion

Including our own,^{1,2} a number of studies have shown that medical examiner records are valuable in monitoring drug-related activity in the community.⁴⁻⁹ This is especially true for the ongoing cocaine epidemic. Because of its popularity, unpredictable toxicity, and connection with violence, medical examiners throughout the country are quite accustomed to finding cocaine in deaths they investigate.¹⁰ Previous reports from this office in Memphis have shown important differences in cocaine-related deaths with respect to race¹ and have indicated the contribution of cocaine to accelerated homicide rates.² With this report, we review a full ten-year history of the cocaine epidemic, starting with the community's first cocaine-related death in 1980.

Throughout the 1980s, cocaine-related deaths increased at a nearly exponential rate. During the last two years, 1988-1989, the cocaine-related mortality rate appeared to plateau; however, it is too soon in 1990 to predict whether the plateau will persist—so far, there is no sign of a decrease in the rate. Looking back at 1986-1987, there was a similar plateau, during which we thought the rate had peaked, but the rapid increase in 1988 extinguished that hope.

Over 80% of fatalities positive for cocaine were in the age range 20 to 39 years, with an average of 31 years. The age range with the greatest number of fatalities was 20 to 29 years, which is lower than in 1986, when the 30 to 39 year group had the highest total. Also more recently, younger fatalities (less than 20 years) have been seen with increasing frequency. Most of the fatalities were men, and compared to the racial distribution of the general population, blacks were disproportionately overrepresented, especially among homicides.

More than half of the deaths were by homicide. Overall, homicides showed the most dramatic increases from year to year. The preponderance of cocaine-related homicides were caused by firearms. For the last two years, at least 25% of Memphis and Shelby County homicide victims have been cocaine-positive. To estimate the contribution of cocaine to these deaths, we previously demonstrated that nearly 40% of homicides with cocaine present in the victims had resulted directly from known disputes or transactions involving the drug.² This is necessarily a minimum estimate because the presence or absence of cocaine in assailants was never determined, because

TABLE 3

ASSOCIATION OF BLOOD ALCOHOL CONCENTRATION WITH MANNER OF DEATH

Blood Alcohol Concentration	Number of Deaths	% Accident	% Homicide	% Suicide	% Natura
0	145	28	45	13	14
>0	154	21	64	8	6
>100 mg/dl	84	23	70	4	2

many other disputes ending in bloodshed were likely drug-related or drug-provoked but not recorded as such, and because several cocaine-negative victims were killed in robberies for money to buy the drug. Thus, the contributions of cocaine and its trafficking to violent crime in this city have been truly substantial. Indeed, the annual homicide rates in Memphis have remained high ever since cocaine became popular.

Our data also pointed out an interaction between ethyl alcohol and cocaine associated with a higher incidence of homicide. Comparing the proportions of cocaine-positive fatalities with and without alcohol in blood found that homicide was more often the manner of death when the decedent was positive for alcohol as well as cocaine. This observation is expected, considering that both intoxicants adversely affect behavioral control.

Cocaine-positive suicides during the decade showed a smaller increase in rate and actually a slight decrease for the last year. As with homicides, the most commonly chosen method was a gun. Hangings and drug overdoses together accounted for a third of the deaths; this was the only category of manner of death in which whites predominated. Many suicide victims, if they gave any indication of motive, blamed their addiction to drugs and/or alcohol for a decision to end their lives.

Accidents ranked behind homicides as second most common manner of death; approximately a third resulted from motor vehicle accidents. A tempting speculation is that cocaine contributed to these deaths by impairing driving performance, but this is complicated by nearly half of the drivers so killed being legally drunk (greater than 100 mg/dl of blood ethyl alcohol concentration). Another speculation remaining untested is that cocaine's stimulant effect may have masked the effects of alcohol intoxication so that certain drivers did not recognize or compensate for their impairment.¹¹

A variety of other physical injuries contributed to the total number of accidental deaths, but there was no obvious pattern except that carelessness was prominent in most. Alcohol intoxication was present in 21%. One highly unusual case resulted in the subject accidentally hanging himself following wildly manic and paranoid psychotic activity induced by cocaine intoxication.

Analysis of circumstances in cases of cocaine overdose found that central nervous system overstimulation, resulting in either seizures or manic hyperexcited behavior, preceded death in the majority that were witnessed. Seizures are known to occur with increased frequency in chronic cocaine abusers due to a "kindling" phenomenon that lowers seizure threshold with repeated doses. 12 Similarly, chronic cocaine administration produces behavioral sensitization so that low doses produce progressively heightened motor responses. Both processes may be mediated via dopaminergic pathways involving dopamine depletion and receptor availability or responsiveness. 13 Consequently, cocaine toxicity is unpredictable and may occur at surprisingly low levels. 14,15

Our data indicate the toxicity of cocaine in producing lethal overdoses. According to the crude toxicity curve (Fig. 5), cocaine's LD₅₀ lies somewhere in the range 1 to 10 mg/L, probably closer to 1 mg/L. A number of deaths occurred at even lower concentrations, and several had no detectable cocaine present in blood. This was more often true for overdose subjects who were found dead and, thus, had a variably extended postmortem interval before body refrigeration and toxicologic sampling. The delays were usually shorter with witnessed deaths. Due mainly to blood esterases, cocaine continues to be degraded after death, so that complete hydrolysis is quite possible. 16 Therefore, measurements of cocaine in a body fluid protected from blood enzymes, such as vitreous humor, as well as determinations of the metabolite, benzoylecgonine, are often critical for accurate assessment of the toxic load.

Despite the relatively minor proportion of cocaine-positive deaths attributed to natural causes, this cause of death increased in number every year. All of the natural deaths were premature, and cardiac events accounted for the preponderance of cases.

Cocaine cardiotoxicity is now well recognized, and its major mechanism is believed to be ischemia caused by drug-induced coronary vasospasm occurring with or without atheromatous lesions. 17-19 Primary cardiac arrhythmia produced by cocaine may be another mechanism but of lesser importance.¹⁸ Two other natural deaths were due to intracranial hemorrhage, reflecting another likely consequence of cocaine abuse. 19,20 In a review of 47 reported cases of intracranial hemorrhage associated with cocaine, 72% were found to have an underlying vascular abnormality, either aneurysm or arteriovenous malformation.²⁰ It is possible that cocaine precipitates bleeding under these conditions by elevating blood pressure and/or constricting blood vessels. A third category of cocaine-related natural deaths included two cases due to asthma. A casual relationship is suggested by previous observations of fatalities due to pulmonary complications associated with the use of freebase cocaine.21

In conclusion, this study has shown that the number of deaths in Memphis and Shelby County with body fluids testing positive for cocaine or its metabolites increased tremendously throughout the 1980s, and there was no indication that the trend is reversing. The black population was greatly overrepresented, especially in the cocaine-related homicides, and cocaine and cocaine trafficking contributed substantially to the high homicide rate over the last several years. In contrast, there was no clear evidence that cocaine alone contributed to motor vehicle accidents or other accidents causing physical injuries. The drug may, however, have been an important factor in several suicides by precipitating depression during the dysphoria of withdrawal or through erosion of personal self-esteem produced by drug addiction. Cocaine toxicity leading to overdose death was unpredictable at low levels. The most common mechanism producing toxic death was central nervous system overstimulation, manifested as either seizures or manic behavior. Measurements of the cocaine metabolite, benzoylegconine, and determinations of cocaine concentrations in vitreous humor were found important for investigating overdose deaths. Premature cardiac deaths increased during the ten-year period, most of them due to ischemic episodes possibly triggered by cocaine in persons with coronary atherosclerosis. Such deaths probably will continue to increase as the "coke generation" ages.

Finally, it is apparent that cocaine remains a major public health and social problem affecting predominantly the black population. Furthermore, the drug is tightly coupled with violence and criminal activity. The cocaine problem persists despite major efforts promoting education, drug abuse treatment, and law enforcement. Thus, it is likely that these efforts are aimed at the wrong target, since much of the drug problem is actually a symptom of social conditions that need correcting before real progress is made.

Acknowledgement

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Isolated Cardiac Rupture Due to a Blunt Chest Trauma

J.P. SPIERS, M.D. and MARTIN A. CROCE, M.D.

Introduction

Traumatic cardiac rupture is a catastrophe with few survivors. Many victims have associated life-threatening injuries that can make the diagnosis of cardiac injury more difficult. Some patients present minimal signs and symptoms of their cardiac injury. A high index of suspicion for intrathoracic injury is required to make a timely diagnosis and facilitate prompt treatment. Untreated, this injury has an abysmal prognosis. The following case illustrates several important points regarding the diagnosis of blunt cardiac rupture.

Case Report

A 25-year-old white man was transported to the Presley Regional Trauma Center approximately 10 minutes after a motorcycle accident, in which the patient had been wearing a safety helmet. Upon arrival his blood pressure was 96/50 mm Hg, heart rate 140/min, and respiratory rate 25/min. His only complaint was of mid-epigastric pain. He had a large contusion on the right anterior chest at the fourth, fifth, and sixth costal cartilages, and his chest wall was tender. He had no other external signs of trauma. Head and neck examination was normal. Chest auscultation showed normal heart and lung sounds. The abdomen was diffusely tender. Neurologic examination was normal. Fluid resuscitation produced no significant change in blood pressure. A chest radiograph was normal, and a diagnostic peritoneal lavage was negative. During the fluid resuscitation the patient's neck veins became distended with a narrowing of his pulse pressure and a marked diminution in peripheral pulses, and heart sounds became more distant. A central venous catheter was placed, revealing a right atrial pressure in excess of 40 cm of water. A subxyphoid pericardiocentesis yielded 5 ml of clotted blood, without significant change in overall hemodynamics. As the patient was being prepared for operation, he sustained cardiopulmonary arrest, and an emergency left thoracotomy was performed. The pericardium was distended with blood. Pericardiotomy demonstrated a 4-cm anterior rupture of the right ventricle. A Foley catheter was placed in the traumatic ventriculotomy and inflated, controlling the hemorrhage and allowing closure of the wound. The patient responded well and was taken to the operative suite for completion of the procedure. Postoperatively, his course was uncomplicated. His neurologic status was normal. Subsequent echocardiogram showed no other evidence of cardiac injury, and the patient was discharged in good condition on the sixth postoperative day. At one year later he continues to do well, with no appreciable disability.

Discussion

With the increase in the number and severity of high-speed vehicular accidents, the number and severity of cardiac injuries have increased. The most frequently encountered injury is myocardial contusion; blunt rupture is the least common.¹ Blunt cardiac trauma has been estimated to account for 5% of all deaths in highway accidents each year, though there is evidence of some degree of cardiac injury in up to 50% of all traffic fatalities. Falls are another, less frequent cause of cardiac injury.

The mechanism proposed to explain cardiac rupture is an overwhelming pressure transmitted to the heart following a direct blow to the chest. The situation of the heart also allows for compression between the spine and sternum, typically as a result of a "steering-wheel injury." This underscores the importance of accurate communication regarding the findings at the accident scene, particularly that of steering-wheel fracture and the use of restraining devices.

Cardiac injuries have long been recognized as lethal. Not until 1954 was the first successful repair of a blunt atrial tear performed.² Since then, more than 40 cases of chamber rupture have been reported. Right ventricular rupture is reported more often than left, and rupture of the atrium is less common than of the right ventricle. Overall, right-sided injuries account for approximately 67% of chamber ruptures. Severe associated injuries have been reported in 72% of cases.³ Since Bright and Beck⁴ showed an equal distribution of chamber rupture with blunt trauma in their 1935 postmortem study of 152 cases of cardiac rupture, this striking divergence of the distribution of injury among survivors versus nonsurvivors demonstrates the lethality of left-sided injury.

Patients with potential cardiac injury can be identified by the initial assessment as well as by a thorough understanding of the mechanism of the accident. Signs

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of external trauma, as in this case, can help lead to a correct diagnosis, but it should be emphasized that patients may show no sign of external thoracic trauma. Delays in therapy of several hours have been reported, often with poor outcomes. Careful physical examination will often delineate the situation. Beck's triad of distended neck veins, hypotension, and muffled or distant heart sounds, while considered indicative of cardiac tamponade, is found in less than 50% of patients. A diminished pulse pressure is occasionally seen, as is a widened mediastinum on chest radiograph. Usually the cardiac silhouette is completely normal with acute tamponade, since the thick pericardium does not distend rapidly. Persistent or worsening hypotension despite aggressive fluid resuscitation is common. Elevated central venous pressure is seen in tamponade, though during vigorous resuscitation this elevation may be false.

Traditionally, pericardiocentesis has been lauded as the gold-standard in trauma because of its diagnostic and therapeutic attributes. Aspiration of non-clotting blood, the accepted hallmark of a successful pericardiocentesis, may be impossible in acute tamponade and could confound the diagnosis if this possibility is not recognized, since there may be doubt as to whether this represents a iatrogenic ventricular or coronary artery laceration or a true pericardial aspiration. The use of an electrocardiogram with the pericardiocentesis needle as an electrode can help minimize this potential confusion. The use of a large-bore intrapericardial angiocath placed at the time of pericardiocentesis can facilitate continuous evacuation while preparation is made for definitive treatment. Despite some recent enthusiasm for aspiration via an anterior approach, subxiphoid aspiration remains more reliable and safer.

Electrocardiography is a nonspecific test for tamponade, but it should be obtained if possible to help define any other underlying cardiac disease. Echocardiography has been advocated in the assessment of stable patients, but is often impractical with acute trauma. Computerized tomography has been used to evaluate associated mediastinal pathology such as aortic dissection, but, like echocardiography, its usefulness is limited in the acute phase of most patients' care. Some authors have suggested angiography and aortography in selected, stable patients in order to evaluate the thoracic aorta, since there are three case reports of combined aortic and cardiac injuries.⁵ Recent work has advocated the subxiphoid pericardial window in the assessment of suspected injury in stable patients. Tamponade can be tolerated for some time, particularly in young, healthy patients, but protracted evaluation is inadvisable. Once a diagnosis of cardiac tamponade is established, plans for surgical evaluation and repair must proceed.

The surgical approach to the injury can be made through a variety of incisions, including median sternotomy and anterolateral thoracotomy. Repair through a posterolateral thoracotomy has been successfully performed when concomitant aortic injury is present, though with some difficulty. In the emergency operation

the left anterolateral thoracotomy incision is preferred, since it affords rapid exposure of the middle mediastinum, and can be extended transsternally to facilitate access to right posterior lesions. This incision also affords exposure of both pulmonary hila and allows separation of thoracic and abdominal incisions in patients suspected of having a contaminated intra-abdominal injury, hopefully decreasing the likelihood of mediastinitis and sternal wound infection. Once defined, the cardiac injury can be controlled by digital pressure, vascular clamps, or Foley catheter insertion. Occasionally fibrillation is used to allow adequate visualization of the injury. Extracorporeal support is rarely indicated. Most injuries are amenable to simple suture repair, though some may require more extensive repairs such as a pericardial or synthetic patch.

The long-term consequences of cardiac injury are related to preoperative time, the extent of injury, and the rapidity of repair. Periods of prolonged hypotension can have devastating neurologic sequelae. As with any cardiac injury, late complications of arrhythmia, valvular dysfunction, infarction, and failure can occur. Patients with preexisting cardiac disease may be predisposed to these late complications. The many invasive and noninvasive cardiographic studies available today are useful adjuncts in the evaluation of cardiac function following repair. Because of the paucity of cases with successful outcomes, no long-term study has been undertaken to define the chronic course of these injuries.

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A Woman With Nausea, Vomiting, and Renal Failure

Case Report

A 56-year-old woman was admitted for evaluation of recent nausea, vomiting, and renal failure, following increasing weakness, myalgia, right flank pain, headaches, anorexia, and a 15-lb weight loss for three months. She had hypertension and hypothyroidism, treated with nifedipine and Synthroid.

On physical examination the patient appeared comfortable, with a blood pressure of 200/110 mm Hg and mild right controvertebral angle tenderness. Laboratory studies revealed a creatinine of 5.6 mg/dl, BUN 28 mg/dl, and PCV 25%; ESR was 140 mm/hr and ANA was negative. Urinalysis showed 3 to 5 WBC/HPF, but was otherwise normal. Chest and abdominal radiographs were unremarkable. Renal sonography revealed bilateral pelvocaliectasis with mild dilatation of the right collecting system. CT scan showed slight distension of the right ureter and central portion of the right renal pelvis, as well as an inhomogeneous retroperitoneal mass encompassing the inferior vena cava, abdominal aorta, and ureters. Cystoscopy with retrograde pyelograms demonstrated mild bilateral hydronephrosis. There were multiple stenotic ureteral segments bilaterally. Following placement of a right ureteral stent and a left nephrostomy tube, serum creatinine declined to 1.0 mg/dl. CT-guided fine-needle biopsy of the retroperitoneal mass revealed marked fibrosis and chronic inflammation. There was no evidence of malignancy.

After two weeks in the hospital, extensive left deep venous thrombosis occurred, confirmed by contrast venogram, and anticoagulation was begun. Approximately three weeks later, exploratory laparotomy with deep biopsies of the retroperitoneal mass, placement of a left ureteral stent, and bilateral ureterolysis with omental wrapping were performed. Biopsies again revealed only fibrosis and inflammatory changes, and treatment was started with prednisone 20 mg/day for presumed idiopathic retroperitoneal fibrosis. This was slowly tapered off over the following six months.

Approximately ten months after her initial episode, the patient was readmitted with malaise, right flank pain, nausea, vomiting, and a 15-lb weight loss over the preceding six weeks. Her creatinine was increased at 2.3 mg/dl, and sonography revealed obstruction of the right ureter. Abdominal CT scan revealed right hydronephrosis and a retroperitoneal mass.

After cystoscopy and placement of a right ureteral stent, renal function improved. Prednisone 40 mg/day was prescribed. One week later the patient was doing well with a creatinine of 1.4 mg/dl.

Discussion

Idiopathic retroperitoneal fibrosis (IRF) was first described in 1905,¹ but gained acceptance as a clinical entity only after Ormond, in 1948, described two patients with anuria, "reduced health, unexplained

anemia, and backache." He described ureteral compression due to envelopment by a retroperitoneal, nonmalignant mass. Since that time, IRF has been included in the differential diagnosis of renal failure.

In approximately two-thirds of patients with retroperitoneal fibrosis, the disease is considered idiopathic; the remaining cases are due to malignancy, retroperitoneal injury, infections, drugs (notably methysergide), and a variety of miscellaneous causes.³

IRF occurs most commonly in the fifth and sixth decades with a male to female ratio of approximately 2 or 3:1. Abdominal, back, or flank pain is the presenting complaint in the majority of patients. Other symptoms include weight loss, anorexia, nonspecific gastrointestinal complaints, and oliguria. Physical signs are less consistent, although hypertension has been noted in approximately 70% of patients.³ Abdominal or rectal masses and lower extremity edema are also seen. Deep venous thrombosis occurs frequently. Laboratory tests reveal a number of abnormalities including increased BUN (>30 mg/dl), anemia (hemoglobin <12 gm/dl), an increased ESR, and pyuria. Autoantibodies to the thyroid have been reported.⁴

Diagnosis is commonly made by IVP. The classic triad consists of bilateral ureteral narrowing at the level of L-5, medial deviation of the ureters, and dilatation of the calices, pelves, and ureters.

Ultrasound is a simple noninvasive technique by which to confirm the diagnosis of retroperitoneal fibrosis. Sonographic findings consist of an extensive retroperitoneal, extrarenal, anechoic smooth-bordered mass anterior to the sacral promontory, and can demonstrate hydronephrosis if present. 5 CT scan reveals a paraspinal, extrarenal, well-marginated lesion (sometimes encasing the large vessels and ureters) that is isodense with the surrounding muscles. 5 Even with these imaging techniques, it can be difficult to differentiate retroperitoneal fibrosis from malignant diseases. Laparotomy is performed to establish the diagnosis and initiate treatment.

Treatment consists of surgical relief of ureteral obstruction and suppression of the inflammatory process. Ureterolysis with omental wrapping is common. Restenosis does sometimes occur, and has been reported from three months to nine years postoperatively.³ Dose and duration of steroids vary considerably, and are empiric. High doses (40 to 100 mg/day prednisone) are generally used initially, followed by a slow

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Presented by Robert L. Neidich, M.D., medical resident, and Kathleen Maletic Neuzil, M.D., Hugh J. Morgan chief medical resident, Vanderbilt University Hospital, Nashville.

tapering to low doses or discontinuation. Prognosis is generally good, with mortality rates of 0 to 14% over several years.⁶

The diagnosis of retroperitoneal fibrosis should always be considered in evaluating patients with back or abdominal pain and renal insufficiency. Because this entity is uncommon, a high index of suspicion is necessary. Prompt diagnosis and treatment portends a favorable outcome.

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Prolonged Fever in a Young Woman

Case Report

A 28-year-old woman presented herself to Vanderbilt Hospital with a headache and fever for eight days. The patient noted several weeks of malaise followed by gradually worsening throbbing frontal headaches with oral temperatures to 104°F. There was no history of otalgia, coryza, rhinorrhea, sore throat, dyspnea, chest pain, myalgia, rash, bruising, or gastrointestinal complaints. She recalled no tick bites or travel history, and her family was well. Pets included only domestic animals. She denied blood transfusion, intravenous drug use, or multiple sexual partners. Five days before admission an initial evaluation in the emergency department revealed no physical abnormalities; spinal fluids and chest radiograph were negative. When symptoms persisted, the patient was admitted for further evaluation.

Physical examination revealed an uncomfortable woman with a blood pressure of 110/50 mm Hg, pulse 100/min, respiratory rate 22/min, and temperature 103°F orally. Pupils were equally round and reactive, with normal extraocular movements. Fundi were normal. No pharyngeal lesions were present. Neck was tender to passive movement without adenopathy or frank meningismus. Cardiovascular examination was normal and lungs were clear to auscultation. Abdominal examination was normal. There were no abnormalities of the skin or joints. Neurologic examination was normal. Laboratory studies showed a hematocrit of 41%, platelets 202,000/cu mm, and WBC count 6,000/cu mm, with 54% neutrophils and 15% atypical lymphocytes. Other abnormalities included SGOT 113 U/L, LDH 465 U/L, total bilirubin 0.5 mg/dl. Chest radiograph was normal.

The patient was admitted for investigation of the possibility of CNS infection. CT scan of the head and the spinal fluid were normal. Mononucleosis syndrome was considered, probably of Epstein-Barr or cytomegalovirus origin. Monospot was not conclusive. Toxoplasma serology, VDRL, ANA, and rheumatoid factor were within normal limits. Westergren sedimentation rate was 26 mm/hr. Despite alleged absence of risk factors, HIV ELISA was found to be positive, with Western blot confirmation. T-cell subsets revealed increased CD8 at 6,220/cu mm (normal 293 to 617) and normal CD4 at 950/cu mm. HIV core antigen (p24) was positive.

Discussion

A syndrome characteristic of mononucleosis may occur in patients with acute HIV infection; incidence is estimated at 33% to 66% of all HIV-positive individuals. The most common symptoms are fever (92%), leth-

Presented by Paul Sabbatini, M.D., medical resident, and Kathleen Maletic Neuzil, M.D., Hugh J. Morgan chief medical resident, Vanderbilt University Hospital, Nashville.

argy (83%), and sore throat (75%); headache, anorexia, diarrhea, meningismus, and photophobia may also occur, and as many as 50% of patients have an urticarial or maculopapular truncal exanthem. Other findings on physical examination include lymphadenopathy, hepatosplenomegaly, and oral aphthous ulcerations.^{2,3} Onset has been described as following infection by from one to six weeks, with a duration of from several days to several weeks.¹

Typical nonspecific laboratory findings include elevated liver transaminases, alkaline phosphatase, and accelerated sedimentation rate, with a negative heterophile antibody test. An atypical lymphocytosis is often present. Lymphopenia and thrombocytopenia are common early, with later lymphocytosis and elevated CD8 T-lymphocytes.³ Generally the ELISA for HIV antibodies remains negative for one to two months after exposure.⁴ Newer serologic tests include HIV core antigen (p24 antigen), which may be detected in serum and CSF within two weeks of exposure. Prolonged antigen-positive antibody-negative states are rare, and sero-conversion usually occurs within several months of acute illness. This patient is less typical in that antibody seroconversion had already occurred.

This illness has features reminiscent of other lymphotrophic agents such as Epstein-Barr virus, cytomegalovirus, hepatitis viruses, toxoplasmosis, rubella, and syphilis, in which the transient increase in CD8 T-lymphocytes has been described as well.^{2,3}

This case illustrates the importance of including acute HIV infection in the differential of mononucleosis syndromes even in the absence of reported risk factors. Standard ELISA antibody tests are often negative initially, and should be repeated in three to six months if the clinical situation warrants.

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Radiology Case of the Month

THOMAS SHORT, M.D.; SANKAR LAKSHMAN, M.D.; and EAPEN THOMAS, M.D.

Case Report

A 69-year-old man was admitted with a 30-lb weight loss over the preceding three months. He complained of occasional nausea, with infrequent episodes of vomiting, and of decreasing appetite, but did not report hematemesis, melena, or abdominal pain. He had diabetes mellitus and hypertension, both controlled with medications.

Physical examination revealed a cachectic man with a firm, non-tender, palpable mass in the left subcostal area anteriorly; it extended about 3 cm below the costal margin. There was no free fluid. Rectal examination was unremarkable, with Hemoccult-negative stool.

Laboratory tests showed a hematocrit of 26%, erythrocyte sedimentation rate 103 mm/hr, serum alkaline phosphatase 174 IU/L, and albumin 2.6 gm/dl. A CT scan of the abdomen was done (Fig. 1). Please select the best answer from choices given below:

- (1) Gastric bezoar
- (2) Lesser sac abscess
- (3) Retroperitoneal lymphoma/sarcoma
- (4) Gastric carcinoma

Discussion

The normal anatomy of the stomach and other upper abdominal structures as demonstrated on CT has been well described. The radiographic appearance is not suggestive of a gastric bezoar, as there are no intervening lucencies within the mass, which, as seen on CT, extends into the wall of the stomach and the lesser sac area. This strongly suggests an infiltrating mass such as carcinoma rather than bezoar.

This mass could be confused with a lesser sac abscess due to its location posterior to the stomach, but the clinical features are not suggestive because of the absence of abdominal pain or leukocytosis. Besides, no fluid collections or air lucencies are noted radiographically; hence, an abscess is excluded.

Other possible diagnoses such as retroperitoneal lymphoma or sarcoma could be considered based on the CT appearance.^{2,3} The presence of mucosal irregularity seems to suggest that this mass is arising from within the stomach, however, and hence retroperitoneal lymphoma is unlikely.

The radiographic appearance strongly suggests an intraluminal lesion within the stomach with mucosal as well as submucosal involvement. Considering the large size, gastric lymphoma could be a possibility, but gastric carcinoma is the best possibility in view of the significant mucosal involvement.



Figure 1. Stomach mass deforming the luminal surface.

CT scan is very helpful for evaluation of neoplasms suspected to be arising from the stomach. It can determine the size of the mass, the presence or absence of adenopathy, extraluminal extension, or the presence of metastases.1 A method of staging gastric neoplasms by CT has been suggested.4 Stage 1: intraluminal mass without gastric wall thickening. Stage 2: gastric wall thicker than 1 cm. Stage 3: thickening of the gastric wall with extension of the tumor to adjacent organs without distant metastases. Stage 4: distant metastases. A disadvantage of this staging system is that it cannot determine depth of involvement within the gastric wall itself. A gastric leiomyosarcoma is difficult to differentiate from an adenocarcinoma, since both can present bulky tumors. They can show areas of calcification or varying areas of density corresponding to necrosis. Upper endoscopy complements the CT study by providing tissue sample.

Gastroscopy in our patient showed a large, fungating, necrotic, ulcerating mass involving the posterior wall of the body and fundus of the stomach. Biopsies with special stains proved it to be adenocarcinoma of gastric origin.

ANSWER: (4) Gastric carcinoma.

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The Public Health Physician in Tennessee

GEORGE W. SMITH, M.D.

By Tennessee statute, public health physicians responsible for enforcing the health and safety laws and providing medical direction for health departments are called health officers. Health officers are generalists in the true sense of the word, having recognized their patients to be the entire population of the communities they serve. A public health physician's responsibilities and involvement in health matters cross the boundaries of most medical specialties during the course of daily activities. On any given day it is not unusual for a public health physician in Tennessee to be called upon to address health issues ranging from immunizations, a rash, AIDS, substance abuse, adolescent pregnancy, or a food-borne outbreak, to name only a few. Generally speaking, Tennessee health officers are charged with promoting health, preventing disease, and protecting the health of all our citizens.

As the spectrum of public health broadens, dictated by evolving social issues, environmental concerns, and the ever-increasing cost of health care, the public health physician must stay abreast of current issues having an impact upon the health of Tennesseans. A recent lead article in the *Journal of the American Medical Association* cited Tennessee as having the sixth highest homicide rate in the United States. This information prompted a number of calls from new agencies across the state, although the problem of homicide was not news to our public health physicians. Homicide and suicide have long been recognized as major public health concerns in the state, and special demonstration projects to prevent homicides among young black men have been a part of our public health program for the past two years.

The model for public health physicians' services in Tennessee requires that they, acting on behalf of the commissioner of the Department of Health and Environment, accept responsibility for public health services in designated geographic areas of the state. Each area corresponds to single-county or multiple-county jurisdictions.

The state's chief medical officer is the physician who occupies the top position among health officers in Tennessee. His responsibility is to assist the commissioner in the development of policy and the implementation of strategies to protect the health and well-being of all Tennesseans.

The next level of administration in the delivery of public health officers' services is the regional health of-

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ficer. Regional health officers provide direction and oversight to county health departments and public health physicians located in their respective regions. Currently, the state comprises four multi-county rural regions and six metropolitan health regions.

The qualifications for a regional health officer dictate that he have post-medical school education and experience totaling at least five years, of which two years must have been in a position with supervisory responsibility in medical administration, preferably in public health. A master's degree in public health, public administration, hospital administration or the equivalent may be substituted for two years of experience. Each year of residency training in a primary care specialty, public health, or preventive medicine substitutes for two years of experience, but substitutions may be made for only three of the five years. There can be no substitution for the two years of responsible supervisory experience in medical administration.

Under the guidance of the regional health officers, the district or county health officer enforces and implements the statutory duties as delegated by the commissioner of the DHE. At a minimum, each district/county health officer must have post-medical school education and experience totaling at least three years, preferably in public health. Each year of residency training in a primary care specialty, public health, or preventive medicine substitutes for two years of experience.

The district/county health officer must have a thorough knowledge of the principles and practices of modern medicine and recent developments in the field of general medicine. He must also serve as liaison between the county health departments and private care providers, with the purpose of assuring patient accessibility to needed services through a continuum of care.

Because the responsibility of the public health physician is to the community's overall health, close ties must be maintained and nurtured with private care providers. The present AIDS and recent measles epidemics in Tennessee are but two examples that demonstrate the interdependency of public and private medicine as each addresses the health needs of Tennesseans.

The roles and responsibilities of health officers in Tennessee will continue to evolve as new and old morbidities and causes of death adversely affect the health of Tennesseans. It is this dynamic challenge that is the driving force for every public health physician.

I Know a Little Bit About a Lot of Things

J. KELLEY AVERY, M.D.

Case Report

At age 46 an obese woman, married and the mother of two teenage children, went to the attending physician, a general surgeon, with a five-year history of "esophagitis." Eight years earlier she had been told that a GI series showed an antral ulcer, for which she was treated with diet, antacids, and antispasmodics, with some relief but not ever the complete cessa-

tion of symptoms.

The patient made numerous visits with the symptoms she attributed to "esophagitis." Several x-ray studies of the upper GI tract had failed to reveal pathology. The gallbladder had been studied several times and no pathology had been reported. She had had a hemorrhoidectomy about five years before, and had been treated off and on for "depression" with various antidepressants and other psychotropic agents. During these years she had treatment for "cystitis" and had been told that she had "mastitis." Throughout this time she continued to complain of epigastric burning, attributed to "esophagitis."

About four years after the above encounter, the patient was admitted to the hospital in order to do further testing. Another upper GI series failed to reveal fluoroscopic evidence of GE reflux. The attending surgeon did an endoscopic (EGD) esophagogastroduodenal examination, reporting "free regurgitation into the distal esophagus. Linear streaking in the distal one-third of the esophagus typical of esophageal inflammation." Aggressive treatment of the condition consisted of H₂ blockers, antacids, elevation of the head of the bed, and antispasmodics, and because the patient appeared "depressed," tricyclic antidepressants were again prescribed. Another year followed, with only intermittent relief of symptoms. Again, she made numerous visits with a multitude of complaints.

About a year later the attending surgeon consulted a gastroenterologist in a nearby medical center. The consultant repeated the EGD examination, and though he noted some reflux, there was no visible esophageal pathology. There did appear to be some inflammation in the stomach and duodenum. A biopsy of the stomach revealed some "chronic

The complaints continued despite more treatment with all the drugs previously used, with little or no relief. Again, the visits were frequent and the complaints were multiple.

One year later the patient was admitted to the hospital in her hometown complaining of a "burning substernal pain." thorough cardiac workup was negative. Another EGD was done, and this time a "gastric ulcer" was found; a biopsy was negative for malignancy. Propranolol was added to the regimen because of the chest pain, and a month later, because of continued complaints, antidepressants were again prescribed.

One month after this visit the patient was seen by her attending surgeon. The office record revealed "patient decided to have a repair of her hiatal hernia." The attending surgeon's note followed, "patient sick in the head." Although "hiatal hernia" was found in one of the earlier studies, it had not been a prominent finding. It must be assumed that the attending surgeon had attributed the symptoms of reflux to the hernia, or, perhaps to her being "sick in the head."

The patient was admitted to the hospital and a type of fundal plication was done. The operative record described "hiatus admits 4 fingers," states that the routine abdominal exploration was negative, and described the procedure. During the dissection of the gastrohepatic ligament, serious bleeding was encountered requiring six units of blood; deep sutures were required to control the bleeding. The spleen was lacerated during the procedure and repaired. The patient appeared to be doing well when she was taken to the recovery room about six hours after the case began. She reacted from the anesthesia appropriately, and went to the SIU.

The first postoperative day the patient had fever to 101°F, tachycardia, and an elevated WBC count. She was examined and found to have significant lower abdominal tenderness. She continued to have fever which was treated empirically. Within three days following the surgery, with continuing fever, she became edematous and dyspneic, and evidence of renal failure developed. She was then transferred to the medical center in a

On the same day of transfer, the patient was taken to the operating room where at exploration the anastomosis line was found to have disrupted, and there was a fulminant peritonitis with copious gastric secretions present. The dyspnea progressed, and ARDS was apparent. Renal function continued to deteriorate, requiring dialysis. Long and heroic efforts were made to save this patient, but she died some eight weeks after the first surgery.

The medical center record contains for the first time the history of an extremely unhappy life. There had been a bad marriage for years, the teenagers had given their mother much trouble, and the family income had depended on the factory job held by the patient until about two months before her death.

Loss Prevention Considerations

The study of this very long and complicated record revealed a general level of care that seemed to be below the standard. Adequate consideration of this patient's social and psychiatric history had never been part of the picture. In retrospect, one could conclude that the frequent visits and multiple complaints literally cried out for someone to look at the whole picture.

The patient "decided to have repair of her hiatal hernia." Multiple studies produced inconsistent findings. The effects of prolonged stress on the GI tract are well known, but were never adequately considered in this

Dr. Avery is chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood, and medical director for Ambulatory/Outpatient Services, St. Thomas Hospital, Nashville.

case, and except for the demeaning remark, "sick in the head," we have little indication that the attending surgeon ever seriously considered this very important part of this patient's picture.

The surgical procedure at the community hospital was difficult to defend in at least two areas. The stomach was transected very close to the esophagogastric junction, without leaving the customary cuff of stomach by which to secure a better anastomosis. The decision to repair the spleen rather than remove it in the face of this very long and bloody operation was the subject of criticism by expert witnesses on the plaintiff's side and a fact that defense witnesses were not anxious to defend. Postoperative care was also marginal. With evidence of some intra-abdominal complication, as evidenced by the fever, the lower abdominal tenderness, the tachycardia, and her generally deteriorating condition, most of the reviewers considered the delay of four days very likely to have been a contributing factor to this patient's death. Another area of criticism by expert reviewers was that the attending surgeon had not done a pyloroplasty and vagotomy to aid the stomach in emptying.

And, if that were not enough, the attending surgeon left town the day after surgery without informing either the patient or her family. His coverage was a generalist who had seen the patient on a few occasions during her long history of complaints.

This patient presented great difficulties to the attending surgeon; she was truly difficult and demanding. It appeared that his reasoning went something like this: "I think I know what's wrong with her, but the evidence is inconsistent. I don't know how to treat her . . . I've tried everything I can think of . . . so . . . let's operate." The poorest of all choices! Get expert help with the "depression"—Yes! refer her to the medical center for management help and not for "rule out or rule in!" A teacher of mine used to tell us, "Any dimwit doctor can treat the straightforward case, but it takes a real doctor to diagnose and manage the patient with this kind of psychosomatic overlay."

Taking all the above into consideration, the only factor that made this case impossible to defend under any circumstances was the remark, "sick in the head." This remark would have provided the jury with ample room to conclude that the attending surgeon didn't know what was wrong with his patient; he really thought she was a mental case, but operated on her anyway! A six-figure settlement closed the books on this tragic story. I doubt, though, that the books will ever be really closed on this case in the mind and heart of the attending surgeon.



"I can't afford to go to the doctor."

We hear that a lot from our patients these days. For the 33 million people who have no health insurance, it's a particularly acute problem.

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Simply put, Health Access America proposes health insurance coverage for all

Americans, regardless of income or health status. It calls for expanded publicly-funded health care for the needy; a stronger Medicare system; employer-provided coverage for all workers and their families with tax incentives for small businesses.

America's physicians are leading the way to reforming the health care system by speaking out on these critical issues. To get a copy of the Health Access America proposal, please call our Member Service Center at 1-800-AMA-3211.

The American Medical Association on behalf of member physicians and their patients.

Awaiting the Grim Reaper With a Covenant Unto Thyself: Creating Your Own Right To Die

MARC E. OVERLOCK, TMA Staff Attorney

"... We assume (for the purposes of Nancy Cruzan's case) that the United States Constitution would grant a competent person a constitutionally protected right to refuse lifesaving hydration and nutrition." Despite this apparent recognition by the Supreme Court majority in Cruzan of a potential right to die, Ms. Cruzan this day still lies in a persistent vegetative state. Why? Because, according to the majority opinion, Ms. Cruzan merely waxed ambiguous to her significant others about the right to die. One year before her accident, she told a housemate that she never wanted to live as a vegetable. The Supreme Court concluded that Ms. Cruzan's personal observations on exercising her right to die "did not deal in terms with withdrawal of medical treatment or of hydration and nutrition."2

Justice Antonin Scalia concurring in the decision proclaimed that he was against such sanctioned suicide:

I would have preferred that we announce, clearly and promptly, that the federal courts have no business in this field; that American law has always accorded the State the power to prevent, by force if necessary, suicide-including suicide by refusing to take appropriate measures necessary to preserve one's life; that the point at which life becomes "worthless," and the point at which the means necessary to preserve it become "extraordinary" or "inappropriate," are neither set forth in the Constitution nor known to the nine Justices of this Court any better than they are known to nine people picked at random from the Kansas City telephone directory; and hence, that even when it is demonstrated by clear and convincing evidence that a patient no longer wishes certain measures to be taken to preserve her life, it is up to the citizens of Missouri to decide, through their elected representatives, whether that wish will be honored.3

Ironically, and in juxtaposition to both the Supreme Court's jurisprudential philosophy and Missouri's apparent victory, the Cruzan family finally succeeded in the local trial court after discovering two new witnesses who recalled right to die statements by Ms. Cruzan. Missouri's Attorney General did not oppose their motions. The case was heard before the same trial judge who originally granted the Cruzans the right to withdraw nutrition and hydration. Had he not granted similar relief, the Cruzans alternatively had sought to move their comatose daughter to a different state with more enlightened right to die laws.

One such state might be Minnesota. In a seemingly irrelevant case, the Minnesota Supreme Court on Nov. 9, 1990 proclaimed that its state constitution offered protections not found in the federal constitution. Minnesota can no longer jail its Amish citizens for refusing to hang the familiar fluorescent triangles on the rear of their horsedrawn carriages.4 For years, Amish citizens had preferred jail to violating their religious tenets against using worldly symbols. Ironically, in the very same case, the U.S. Supreme Court earlier had refused to grant the Amish defendants such religious liberty based on the First Amendment.⁵ The Court sent the case back to Minnesota for another review.

The Tennessee Supreme Court has found greater protections of liberty in our own state constitution. Recently, for example, the Tennessee Court determined that the state's constitution required a more stringent definition of probable cause in current search and seizure law.6 Two articles of the state constitution may define the Tennessee citizenry's right to die. Article 1, Section 7, in pertinent part reads as follows:

Unreasonable searches and seizures—general warrants.—That the people shall be secure in their persons ... from unreasonable ... seizures. ... '

Article 1, Section 8, also reads, in pertinent part as follows:

No man to be disturbed but by law.—That no man shall be taken or imprisoned, or disseized of his ... liberties or privileges ... or in any manner ... deprived of his life, liberty, or property, but by the judgment of his peers or the law of the land.

Section 7 is similar to the Fourth Amendment, while Section 8 expands on the Federal Constitution's due process and liberty protections. Even before the Tennessee General Assembly passed the Tennessee Right to Natural Death Act7 in 1985, Justice Drowota cogently noted that "... A competent adult is free to accept or reject lifesaving medical treatment."8 The Act, which legalized living wills, states as follows:

... Every person has the fundamental and inherent right to die naturally with as much dignity as circumstances permit and to accept, refuse, withdraw from, or otherwise control decisions relating to the rendering of his or her own medical care specifically including palliative care and the use of extraordinary procedures and treatment.9

Despite Justice Scalia's opinions in Cruzan, the living will legislation also declares that the "withholding or withdrawal of medical care from a declarant ... shall not, for any purpose, constitute a suicide, euthanasia or homicide."10 The Act's provisions are not all-inclusive in declaring a patient's right to die. The new Durable Power of Attorney for Health Care statute,11 thus expands patients' rights. Unfortunately, unlike the living will legislation, no form appears in the Act. Citizens are expected to produce their own.

In light of this problem, and the estimation that less than 10% of the U.S. adult population has executed any terminal care form whatsoever, a new Durable Power of Attorney for Health Care and Medical Directive Document follows this article. The document incorporates a chart originally published in JAMA.¹² The document is set forth in plain English, which should provide for easier understanding and execution. It is designed to be used as an adjunct to patient care. In sum,

... it provides an opportunity for significant improvement in the documentation of patients' preferences regarding life-sustaining care in states of incompetence. As an expression of a patient's wishes, the [document] should ... facilitate physician-patient discussions of critical and terminal care options.12

The form and instructions for its use follow this article.

REFERENCES

- 1. Cruzan v. Director, Missouri Dept of Health, 111 LEd2d 224, 242 (1990).
- 3. 111 LEd2d at 251.
- 4. State of Minnesota v. Hershberger, et al, No C9-88-2623, slip op (Minn, Nov 9, 1990).
- 5. 494 US ____, 110 S Ct 1918 (1990). 6. State v. Jacumin, 778 SW2d 430 (Tenn. 1989).
- Tenn Code Annotated §32-11-101.
- 8. State v. Northern, 563 SW2d 197, 214 (Tenn. 1978).
- 9. TCA §32-11-102(a).
- 10. TCA §32-11-110(a).
- 11. TCA §34-6-201.
- 12. Emanuel L, Emanuel E: the medical directive-A new comprehensive advance care document. JAMA 261:3288-3293, 1989.

HOW TO FILL OUT THE DURABLE POWER OF ATTORNEY FOR HEALTH CARE AND MEDICAL DIRECTIVE CHART

- (1) Please read all the pages of this document before you fill it out. It includes these instructions, a legal warning, a main form, and a chart at the end ("Medical Directive"). This document is different from a living will. You should talk with your doctor about this document since it is about your future health care. You need to give a completed copy to your doctor to keep in your medical record. (Never put it in a safety deposit box because it will take too long for your loved ones or your doctor to find.) Give copies to your agent (and alternates), family members, friends, and minister.
- (2) After reading through all these materials, fill out the section for your name and address. You should print or type this form to make sure people can read it.
- (3) Who should you name as your agent and alternates? That decision is up to you *and* the persons who you want to choose as your agents and alternates. (Make sure you include their addresses and telephone numbers so your doctors and loved ones can contact them. Otherwise this form is useless.)
- (4) Tennessee law prohibits your picking certain people to be your health care agents. You cannot choose:
 - (A) Your treating health care provider (e.g., your doctor or nurse);
 - (B) An employee of the treating health care provider (e.g., one of the doctor's assistants);
 - (C) An operator of a health care institution (e.g., a hospital administrator);
 - (D) An employee of an operator of a health care institution;
 - (E) Your conservator (if you have a will).
 - (*Note*: The only way you can choose someone listed above in (B) or (D) is if that person is a relative of yours by blood, marriage, or adoption. They must meet the other requirements of this law. You should call a lawyer for help).
- (5) Once you have listed your agent and alternates, you should sign and date the form in the presence of two witnesses or an unrelated notary public. There are rules to follow for the witnesses. Do not use your agent, or your doctor (or other health care provider), or any of the other people listed in (A) (E) above as witnesses. (It's against the law.) If you use a relative for one witness, make sure the second witness is *not* your spouse, or anyone related to you or entitled to inherit any of your estate or property when you die. Do not use anybody you have named in your will or codicil. If you ask a notary public to sign your form instead, you do *not* need to use two witnesses.
- (6) This document has two parts. The first part follows Tennessee law and allows you to choose, as your agent, the person whom you want to make health care decisions for you when you are unable. The second part of this document is a chart that gives you the chance to make medical treatment decisions, in advance, under different illness or medical disability situations. It was created by Drs. Linda and Ezekiel Emanuel, two physicians in Boston who believed that people need a form that would be easy to use and would help them think about possible illnesses they might someday have. By filling out the chart, you give your agent instructions to follow. These instructions will guide your agent in deciding what you would want your doctor to do in each situation. You may want to go over this chart with your doctor, family, lawyer, minister, and friends. The chart gives you the chance to say, ahead of time, what kind of medical care you would want. Make sure that you fill out the chart at the end by checking the boxes. If you have trouble understanding it, talk to your doctor, who will be happy to help you.

TENNESSEE DURABLE POWER OF ATTORNEY FOR HEALTH CARE AND MEDICAL DIRECTIVE CHART

Warning to Person Executing this Document:

This is an important legal document. Before executing this document, you should understand the following important facts.

This document gives the person you designate as your agent (the "attorney-in-fact") the power to make health care decisions for you. Your agent must act consistently with your desires as stated in this document.

Except as you otherwise specify in this document, this document gives your agent the power to require your doctor not to give treatment, or to stop treatment necessary to keep you alive.

Notwithstanding this document, you have the right to make medical and other health care decisions for yourself so long as you can give informed consent with respect to the particular decision. In addition, no treatment may be given to you over your objection, and health care necessary to keep you alive may not be stopped or withheld if you object at the time.

This document gives your agent authority to consent, to refuse to consent, or to withdraw consent to any care, treatment, service, or procedure to maintain, diagnose, or treat a physical or mental condition. This power is subject to any limitations that you include in this document. You may state in this document any types of treatment that you do not desire. In addition, under Tennessee law a court can take away the power of your agent to make health care decisions for you if your agent: (1) authorizes anything that is illegal, or (2) acts contrary to your desires as stated in this document.

You have the right to revoke the authority of your agent by notifying your agent or your treating physician, hospital, or other health care provider orally or in writing of the revocation.

Your agent has the right to examine your medical records and to consent to their disclosure unless you limit this right in this document.

Unless you otherwise specify in this document, this document gives your agent the power after you die to (1) authorize an autopsy; (2) donate your body or parts thereof for transplant or therapeutic, educational, or scientific purposes; and (3) direct the disposition of your remains.

If there is anything in this document that you do not understand, you should ask a lawyer to explain it to you.

HEALTH CARE POWER OF ATTORNEY

I,, of	
(Street Address) (Quare) day of, 19, after having completely read this document at the document at	(Town or City) (County) and understood its contents, including the legal warning
on the previous page, do hereby authorize and appoint:	(Agent's Full Name)
Of(Agent's Address and Phone Number)	_to act as my health care agent (or attorney-in-fact) to
make health care, medical treatment, and personal care decisions for me according I have specifically told the agent during the course of our relationship. I furture and personal care decisions only if and when I become incompetent or otherw about my medical treatment. This durable power of attorney shall take effect with the complete and final authorization that I am granting to my agent inclusionally incomplete and final authorization that I am granting to my agent inclusionally incomplete and final authorization that I am granting to my agent inclusionally incomplete and final authorization that I am granting to my agent inclusionally incomplete and final authorization that I am granting to my agent inclusionally incomplete and final authorization that I am granting to my agent inclusionally incomplete and final authorization that I am granting to my agent inclusionally incomplete and final authorization that I am granting to my agent inclusional pain relief), to maintain, diagnose, or treat any physical or mental conditional the possession or control of any person or entity. (2) The authority to access, review, collect, transfer, copy, or otherwise make in the possession or control of any person or entity. (3) The authority to grant or waive liability on the part of any person or entity. (4) The authority, should I die, to dispose of my remains as my agent deems autopsy if it is deemed necessary. Organ Donor's Certification: By checking the appropriate line below I: Authorize my health care agent to make an anatomical gift of my bo Do Not Authorize my health care agent to make an anatomical gift of my bo Do Not Authorize my health care agent to make an anatomical gift of my bo Do Not Authorize my health care agent to make an anatomical gift of my bo Do Not Authorize my health care agent to make an anatomical gift of my bo Do Not Authorize my health care agent to make an anatomical gift of my bo Do Not Authorize my health care agent to make an anatomical gift of	ther understand that my agent can make such health ise unable to communicate my wishes and decisions when I become incapacitated to the extent that in the or unable to communicate as described above. des (but is not limited to) the following: and all care, treatment, service, procedure (including on. This authority includes the power to hire, fire, or or entities that my agent believes are necessary. It is use of my medical records and related information that the time of my treatment or personal care. The necessary mecessary. My agent has the authority to require an expensible for my death. The ses of this document in the event it contravenes the control of
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(First Alternate Agent's Name, Address, and Phone In Second Alternate: Second Alternate Second Alternate Agent's Name, Address, and Phone In Second Alternate Agent's Name, Address, and P	Number) (Your Signature) are available, have a notary public sign this document under Part B. Part (B) STATE OF TENNESSEE) COUNTY OF
(First Alternate Agent's Name, Address, and Phone In Second Alternate: Second Alternate Agent's Name, Address, and Phone In Second Alternate Agent's Name, Address, and Phone Instructions: You must have either two witnesses sign this document under Part A, or if no witnesses Part (A) "I declare under penalty of perjury under the laws of Tennessee that the person who signed or acknowledged this document is personally known to me to be the principal, that the principal signed or acknowledged this durable power of attorney in my presence, that the principal appears to be of sound mind and under no duress, fraud, or undue influence, that I am not the person appointed as attorney-in-fact (the agent) by this document, and that I am not a health care provider, an employee of a health care provider, the operator of a health care institution, nor an employee of an operator of a health care institution."	Are available, have a notary public sign this document under Part B. Part (B) STATE OF TENNESSEE) COUNTY OF
(First Alternate Agent's Name, Address, and Phone Instructions: You must have either two witnesses sign this document under Part A, or if no witnesses Part (A) "I declare under penalty of perjury under the laws of Tennessee that the person who signed or acknowledged this document is personally known to me to be the principal, that the principal signed or acknowledged this durable power of attorney in my presence, that the principal appears to be of sound mind and under no duress, fraud, or undue influence, that I am not the person appointed as attorney-in-fact (the agent) by this document, and that I am not a health care provider, an employee of a health care provider, the operator of a health care institution, nor an employee of an operator of a health care institution." (Signature of Witness #1) (Print Date)	Number) are available, have a notary public sign this document under Part B. Part (B) STATE OF TENNESSEE) COUNTY OF
(Second Alternate Agent's Name, Address, and Phone I (Second Alternate Agent's Name, Address, and Phone I (Date) WITNESS SECTION Instructions: You must have either two witnesses sign this document under Part A, or if no witnesses Part (A) "I declare under penalty of perjury under the laws of Tennessee that the person who signed or acknowledged this document is personally known to me to be the principal, that the principal signed or acknowledged this durable power of attorney in my presence, that the principal appears to be of sound mind and under no duress, fraud, or undue influence, that I am not the person appointed as attorney-in-fact (the agent) by this document, and that I am not a health care provider, an employee of a health care provider, the operator of a health care institution, nor an employee of an operator of a health care institution." (Signature of Witness #1) (Print Date) (Print Name and Address of Witness #2) "I further declare under penalty of perjury under the laws of Tennessee that I am not related to the principal by blood, marriage, or adoption, and, to the best of my knowledge, I am not entitled to any part of the estate of the principal upon the death	Are available, have a notary public sign this document under Part B. Part (B) STATE OF TENNESSEE) COUNTY OF

MEDICAL DIRECTIVE CHART

If I am in a coma, and I have a small likelihood of recovering fully, a slightly larger likelihood of surviving with

SITUATION (B)

larger likelihood of dying, then my wishes regarding the use of the following, if considered medically reasonable, would permanent brain damage, and a much

MY MEDICAL DIRECTIVE

age, of sound mind and appreciating the consequences of my decisions. This Medical Directive expresses, and shall stand for, my wishes regarding medical treatments in the event that illness should make me unable to comunicate them directly. I make this Directive, being 18 years or more of

CARDIOPULMONARY RESUSCITATION-

if on the point of dying the use of drugs and electric shock to start the heart beating, and artificial breathing.

MECHANICAL BREATHINGbreathing by a machine. 7

nutrition and fluid given through a tube ARTIFICIAL NUTRITION AND HYDRATION— 3

such as removing the gall bladder or pari MAJOR SURGERY-

in the veins, nose, or stomach

KIDNEY DIALYSISof the intestines. 3

cleaning the blood by machine or by fluid

passed through the belly. CHEMOTHERAPY-

drugs to fight cancer 9

such as removing some tissue from an MINOR SURGERYinfected toe.

such as using a flexible tube to look into the stomach.

INVASIVE DIAGNOSTIC TESTS—

@

9) BLOOD OR BLOOD PRODUCTS-

drugs to fight infection. 10) ANTIBIOTICS-

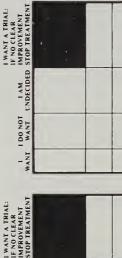
11) SIMPLE DIAGNOSTIC TESTSsuch as blood tests or x-rays.

THEY DULL CONSCIOUSNESS AND INDIRECTLY SHORTEN MY 12) PAIN MEDICATIONS, EVEN IF

SITUATION (A)

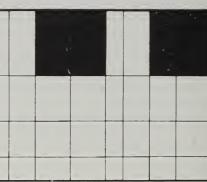
If I am in a coma or in a persistent vegetative state, and in the opinion of my physician and several consultants have no higher mental functions no matter what is known hope of regaining awareness and done, then my wishes regarding use of the following, if considered medically reasonable, would be:

I WANT A TRIAL: IF NO CLEAR I NORO I AM IMPROVEMENT WANT WANT UNDECIDED STOP TREATMENT









SITUATION (C)

If I have brain damage or some brain disease which cannot be reversed and which makes me unable to recognize people, or to speak understandably, but I

SITUATION (D)

If I have brain damage or some brain disease which cannot be reversed and which makes me unable to recognize considered medically reasonable, would be: people, or to speak understandably, and I also have a terminal illness, such as incurable cancer which will likely be the cause of my death, then my wishes



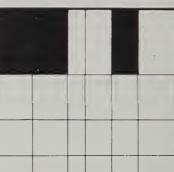


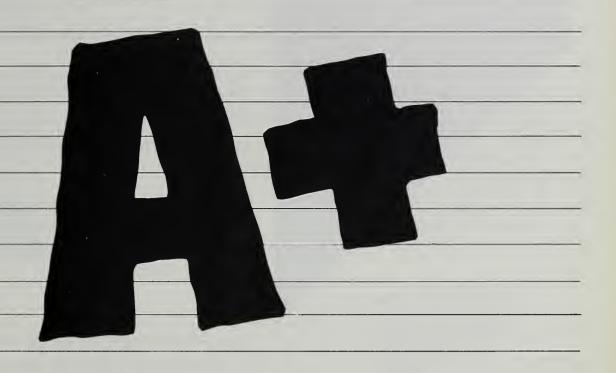




I WANT A TRIAL: I DO NOT I AM IMPROVEMENT WANT WANT UNDECIDED STOP TREATMENT have no terminal illness, and I can live in considered medically reasonable, would be: this condition for a long time, then my wishes regarding use of the following, if







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HAMEL B. EASON

A Medical Souffle

GRAND MARNIER SOUFFLE

3 T butter 2 T flour 2/3 c milk 1/2 c sugar 1/4 t salt

1 t vanilla

1/2 c Grand Marnier
5 eggs, separated
6-8 ladyfingers

Melt butter in saucepan; blend well with flour, gradually adding milk, stirring constantly. Add sugar, salt, and vanilla. When sauce is thick and smooth, remove from fire and cool. Add Grand Marnier, beaten yolks, stir; fold in stiffly beaten egg whites. Butter 2-qt. Pyrex baking dish, sprinkle with sugar; crumble ladyfingers sprinkled to taste with additional Grand Marnier; cover with batter. Cook in 400-degree oven for 15 minutes; cut heat to 375 degrees for 15 more minutes. In blender whip vanilla ice cream lightly flavored with additional Grand Marnier. Serve over souffle. Serves 4-6.

I have followed this recipe many times, and the souffle I have produced varied considerably from one occasion to another. It was always edible but definitely the outcome varied in its quality. I'm not too good at dividing the yolks from the whites of eggs. I now know to do that over a single container one at a time, and transfer each to a larger container; otherwise, one broken yolk could contaminate the whites of a dozen eggs. Sometimes the ladyfingers are different. The Grand Marnier is always great. Try this recipe sometime—it's fun, but devote a lot of time and patience to it.

For several years now, I have been trying to educate myself about practice parameters. I believe we all need to develop an understanding and some personal philosophy in regard to this new science, which seeks to give broad definition to the way disease is diagnosed and treated. Will practice parameters be cookbook medicine, rigidly stifling a free, intelligent variation and innovation in clinical approach to disease? Or will practice parameters be the professionally derived, scientifically valid avenue to quality medical care? I believe myself that parameters can be the hope for a much improved quality of practice life for physicians. What would you give to stop all the questions about "unnecessary care"? What would you give to be free from all the hassle with utilization review questions? What would you give to have reasonable pre-procedure review criteria that we all could accept? What would you give to see peer review done well? What would you give to see malpractice litigation diminish? What would you give if medical insurance payment coverage could be simplified? I would wager you would give a lot to have these hassles in medicine diminish. This is my hope for practice parameters.

AMA is exercising primary leadership in parameter development, dissemination, and implementation. Under AMA guidance the Practice Parameters Forum with active participation of over 60 medical specialty societies and state medical associations meet quarterly in this effort. All parameter development is guided by AMA principles set out in multiple reports of the Board of Trustees with House of Delegates' approval.

Medicare, insurance companies, utilization review entities, and plaintiff attorneys have a way of messing up what we recommend. I believe we have a chance to make a better world with practice parameters.

He that cannot obey, Cannot command.

—Benjamin Franklin
Poor Richard's Almanac

Hamel B. Esson M.D.

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FEBRUARY, 1991

editorials

Manufacturing a Cultural Subclass

A familiar scene from depictions of life in the early 1930s is the long lines of haggard, woebegone, often once prosperous men and women awaiting service from the steaming kettles of the soup kitchens and bread lines that flourished in our big and not so big cities during those years. Those who remember the days of the Great Depression are coming now to be few and far between, and most of those remaining have retired from active involvement in society. In the wake of the Depression lay a new, generally non-productive, noncompetitive subclass of society,

manufactured by federal largess. We need to attend carefully to the lessons of the day, because if Professor Dan McMurry is correct in his assumptions, gleaned from the experience in Murfreesboro and reported elsewhere in this issue of the *Journal*, we are on our way to reinventing that wheel. We appear to be producing, or at least fostering, another such dreary subclass, if we have not already.

Welfare is a perfectly good word that the older dictionaries define as "health, happiness, and general well-being; prosperity." With the New Deal of the 1930s, an additional definition was added: "economic or social benefits provided to a certain group of people, especially aid furnished by the government or private agencies to the needy or disabled." It is hard to quarrel with the propriety of that, and to do so might, often with justification, though not always or necessarily, label one as lacking in charity, and indeed gentility, and even civility. Though there are indications that at least some of the authors of the federal welfare program of the Depression years were deliberately fostering dependence of the people on big government, with an eye toward a socialistic welfare state, most looked upon it simply as a mechanism for helping those down on their luck to get back on their feet—to tide them over, in short, until prosperity returned. If indeed that was their motive, the plan went sadly awry. It went awry because bureaucracies do not go away when the problems do; they are self-perpetuating, and look around for another raison d'etre.

Though the welfare program started out innocently and appropriately enough by training people and putting them to work at a variety of tasks both significant and trivial, what it did ultimately, because it did not close up shop once its job was done, was manufacture a subclass of deadbeats recruited from the class of working, or semi-working, poor. That was when the term "welfare" developed a pejorative connotation among the honest, hardworking majority of the population.

Two of the most memorable characters of my boyhood belonged to that pool. One was a huge man, half black and half American Indian, who maintained his generally high blood alcohol level by topping trees. Even during Prohibition "T" reeked of alcohol, and it was always a mystery to us boys, and likely to our elders as well, though we never discussed it with them, how in such a state he could spend a major part of his life in the treetops without dashing himself to smithereens. But he did. As far as I'm aware, he died of old age, which he did at a very old age. His wife mostly supported the family by taking in washing, but she refused to support his habit; T

usually worked only enough to do that, though he was always in great demand. When on occasion his wife locked him out, he could always find room in someone's servants' quarters, an anachronism in today's world. The likes of T are also an anachronism; these days we kill them off early with welfare, just as we have done the full-blooded American Indians.

My other memorable character was an ostensibly and I think ostentatiously dim-witted young black man who we boys, and some of our elders, including my parents, believed was not nearly so dull as he liked to pretend. At least, he could perform many odd jobs with great skill. He thought, or pretended to think, he was a locomotive, making all the requisite noises with either his mouth or his feet, at the same time going through all the motions of driving one, motions he had learned by long and close, if unofficial, association with them. When he was on the Mountain he lived with his mother, but that was infrequent. When he wasn't playing train, he was riding their rods; he was widely traveled, and whenever he returned he would regale us with accounts of the far-flung places he had visited. Whether they were figments of his imagination or not we had no way of knowing, but they were very original and highly convincing. Thinking back, I believe he was an entertainer and raconteur of the order of Mr. Bones and Uncle Remus, and his imputed mental status a facade. His return to the Mountain was always announced by the familiar shuffle-shuffle patpat-pat shuffle-shuffle of his feet and his "Choo-choo toot-toot ... clang-clang ... whooooowhooOOoooh," with which word would quickly spread that Columbus was back in town. When he was away he apparently either camped with the hobos, or lived with friends, supporting himself by doing odd jobs. Today Columbus wouldn't stand a chance.

Men such as those, who in their own way were productive members of society, and even necessary for its proper functioning, have disappeared from the scene, victims not only of welfare, but also of the violence of society, which would make pariahs of them. They were content, in fact eager, to remain on the edge of the system, but were willing to do enough work, barely, to stay there. Though they accepted handouts, and dressed in cast-off clothes, they never sought them. Food and clothing were simply a part of their compensation. Today they would be considered bums, and they would be bums, manufactured victims of the system. They were not bums to the citizens of Lookout Mountain, and they considered themselves among the more fortunate mem-

bers of society in that they were doing exactly what they wished to be doing, or anyway mostly. Deprived of their kind, society does not function nearly so smoothly.

There is a difference between can't work and won't work. Many of those out of work are out of work not because they can't find work, but because they can't find a position; again, there is a difference. This work status stems generally from a combination of the all-too-human disaffection for labor with the affectation that there are forms of occupation that on their face are demeaning, such usually reserved for pursuits involving labor. It would seem, therefore, that the former and the latter are causally related, and the two ought to be categorized together as shiftlessness. This is exemplified by the vast quantity of jobs that want doing and go abegging in the face of burgeoning unemployment. It defies reason, and it is fomented by the very mechanisms that profess to solve it.

The problem is compounded, of course, by the heartless ejection of the mentally or emotionally deficient from the institutions where they belong and could be cared for, into their communities, which in many instances means to the streets of their communities, which are ill-equipped for, and indeed incapable of, coping with them. Not only do they add to the numbers of charges who can't work; they are often dangerous to both themselves and others, since they are notoriously noncompliant patients (or "clients," as they are sometimes euphemistically referred to) who fail to take the medications that keep them tractable. Many of them become addicted to alcohol or even harder drugs, which does nothing for either them or the community.

In recognition of sloth as mankind's most destructive trait, the same Apostle Paul who wrote man's most notable paean to love also said, "He who will not work, let him also not eat." True charity may require the unpopular and seemingly uncharitable approach, sometimes known as tough love, exemplified in the Apostle's charge. True love, *agape*, seeks only the good of its object, even, if necessary, at the expense of the approbation of both its object and society. It is the love shown by a parent in disciplining a child. It would appear that mechanisms aimed only at getting the street people off the streets may do nothing more than make it possible for them to stay on the streets, and for the shiftless to become even more shiftless, to their ultimate harm, if not destruction.

Programs aimed at helping the destitute gain a livelihood and regain their dignity, and at supporting them while they do, are true charity. Those who contribute only to keeping them bums are, for my

money, suspect, even if they are sponsored by the churches with their social gospel, or the federal government. Those efforts could be better directed towards remedial programs aimed at getting and keeping the remediable off the streets, and in persuading the politicians to make funds available for the care of the mentally sick and handicapped. As to the rest, it is a bottomless moneyhole. The problem of the homeless is a complex one, one that simply providing shelter does little to remedy, but instead simply diverts attention and scarce resources.

As in every other area of life, the problem of the homeless requires circumspection; as everywhere else, circumspection is in short supply there, too.

J.B.T.

To Abort or Not To Abort: That Is the Question

One of the problems of living hand to mouth, as this Journal does, is that there is often scant time to react editorially to other items that appear in a given issue, particularly the monthly features, which can't be held over, and frequently arrive at the last minute. A case in point is last month's President's Page, "Decisions and Consequences," (J Tenn Med Assoc 84:29, 1991). Though Dr. Eason sometimes skates in on last-minute thin ice, he didn't this time, and I also, uncharacteristically, reacted in plenty of time. It was just that I like to let my editorials ripen for a few days before I submit them, having found that rushing things into print is a good way to get one's foot planted squarely and firmly in one's mouth, a situation I find at the very least distasteful. Well, this time one thing led to another, and by the time this editorial surfaced again from its ripening process, I was informed by our very efficient managing editor that the intended issue was already pasted up, and if I insisted upon putting the editorial where I wanted it—as I could have, being the boss—it would negate a lot of her toil and generally screw things up, and she would become badly bent out of shape. Now a misshapen managing editor has only slightly less fury than a woman scorned, and being as how in this case I would doubtless have on my hands the two in one, I desisted. The editorial did not, therefore, get where it was supposed to be—or at least where I thought it was supposed to be.

My immediate reaction was the hell with the whole thing; perhaps this was a message from a higher power that I had best leave well enough alone,

and keep my mouth shut—again uncharacteristically. But editors generally, and this one particularly, are characteristically wont to rush in where angels fear to tread, and having already gotten it into may head to take one last shot at the matter of abortion, rush in I did, though rush is scarcely the proper term, since had I rushed I would not be having to write these new opening paragraphs. (Then, too, a lot of angels and a lot of others not so angelic have already rushed in there, anyhow.) I apologize to you for putting you to the inconvenience of backtracking, should you wish to make comparisons, as I hope you will so as to find out that Dr. Eason and I are in basic agreement, but with a difference that I thought needed mentioning. So much for explanations and so on.

I really hesitated to get back into this quarrel, since I have already said all I have to say about it several times before in these pages, and in any case anything I have to say about it is scarcely helpful, since my thinking on it is muddled. However that may be, since Dr. Eason reintroduced the matter of abortion into the *Journal* in his President's Page last month, I felt called upon to get my oar in, too. (Note that my tardiness required some changes in tense, but otherwise the editorial is as I wrote it for publication last month. I just thought I'd clear that up, in case you're interested, which you likely aren't.)

My sole reason for responding is to reiterate my position that this is not medicine's quarrel. The law-makers and jurists have tried to make it ours by attempting to require medicine to tell them when life begins. That is their cop-out. Life begins for legal purposes whenever society says it begins. To say that it begins at anytime later than when it does begin, which is when a sperm and an ovum get together to start building a baby, is specious, and can be supported only by edict. Medicine does not issue edicts; lawmakers and jurists issue edicts.

When I say that abortion is not medicine's problem, I do not wish to be misunderstood as meaning that it is not the problem of doctors. Doctors are citizens, and have the same responsibilities in that respect that other citizens do, which is to obey the law, and to use their influence as individuals to shape those laws in whatever way they as individuals wish. In addition, in my view the doctor who decides that he will perform abortions must, in order to be true to both himself and his calling, reconcile that decision with the first tenet of that calling, which is to first do no harm, but rather to heal. Those who have compunctions on either moral or ethical grounds and yet choose to do abortions anyway generally justify such participation on grounds that their first duty is to their patients, and their patients are the mothers.

Those decisions are, though, individual ones; they are not the business of organized medicine, which is why I have opposed, and shall continue to oppose, any efforts to have medicine's voice raised as being either pro-choice or anti-abortion. This also happens to be the stated policy of the American Medical Association.

Like Dr. Eason, I have a problem with abortion on religious grounds. In addition, I have a problem with it on Constitutional grounds. Abortion is not simply the taking of a life; it is the taking of an innocent life, which makes it different from other situations in which society condones, or even requires, such action, such as war and capital punishment. (Not that a lot of innocent blood isn't shed in war, which of course it is. It's only that making war is one of the prerogatives of society, or at least of its leaders. One kills so as to avoid being killed.) At whatever point you believe the fetus becomes an individual, you must believe it is at that time fully protected under the Constitution, and has the same rights you and I have. If its life is to be terminated, it must be for cause, and not just because it's there.

Like Dr. Hays Mitchell, though, whom Dr. Eason quotes, I also have problems with the absolute prohibition of abortion. Under certain circumstances, therefore, I am pro-abortion. What I am is not prochoice, used in the sense the organized pro-abortion forces use the term. They are not the same thing. What I am opposed to is the sacrificing of an innocent life on the altar of Venus-or, to put it more bluntly, in terms that won't be misunderstood, the taking out of a contract on the life of one's innocent little baby simply because it is the inconvenient product of one's own indiscretion. "Oh, but," you say, "what's inside that womb isn't a baby yet; it's just a li'l ol' mess o' cells that can't think or do anything else, constructive or otherwise, except be a bother; why, it can't even breathe." Now, that's lawyer talk. What lawyers do is try to get you all tangled up in definitions. What's inside that womb has already gotten its start as a baby, and as far as I can tell, and I have every reason to believe as far as God can tell, too, it is a baby, even if it's only a little baby baby. That's what I think; don't pin me down, because there's no way to prove it, one way or the other. It is not a medical decision. It might be a theological decision, though I expect you might find a quarrel about that, too. It could be made a legal decision, but it would become one of those only after the people (society) had spoken.

All of the simplistic comments to the contrary notwithstanding, this is not a matter that lends itself to an easy solution, and attempts to make it such have caused all sorts of mental, moral, ethical. and occupational anguish, brought on by favoring the welfare of either the baby or the mother at the expense of the other. I am against abortion, but the mother also needs to be considered. At the same time, I want it clearly understood that in this usage of the term *mother* I exclude women who want an abortion just because they set out to have fun, happened to get themselves knocked up without meaning to, and are simply looking for a way out. Usually they don't deserve much consideration. On the other hand, sometimes they do; there are a lot of sweet-talkin', two-timin', fast workin' men around.

I wish it were as simple for me as it seems to be for some of my friends and colleagues, but it isn't. To compound my dilemma, I find on both sides of the issue individuals for whom I have the highest regard and affection, people whose integrity I would not question for a minute—even though they might on occasion question each other's. I do not, therefore, intend to engage in any exchange of pleasantries over the matter. I have spoken my piece, which comes from just short of a half century of worrying about it. That worrying started long before Roe vs. Wade with a destitute, teenaged black girl I autopsied as a second year medical student. While the girls who could afford it were going to New York to have their abortions done by skilled operators under aseptic conditions, she died of sepsis from doing an abortion on herself with a coat hanger. I can still see her; hence my reluctance to play Solomon.

J.B.T.

P.S. Now About the Birds and Bees . . .

Birds do it, bees do it . . . Let's do it! Let's fall in love. Popular song, way back when

Falling in love is the point of almost everything I can think of—not quite, but almost. Falling in love can have all sorts of consequences, some intended and some not. Foremost among them is increasing the population, which also may or may not be intended, even though that is the what falling in love and so on is supposed to be all about, popular notions to the contrary notwithstanding. There are other consequences, of course, than that one, but that is the one I am dealing with here.

Now one would think, would one not, that if that particular consequence could be handily circum-

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vented, there would be a rush to embrace the means for circumventing it? After all, a lot of effort has been expended by all parties concerned, either personally or commercially, on attempts at nullifying it, either before or after the fact. Almost no one believes that before the fact is not preferable, as after the fact is at best messy, and has produced divisiveness and strife among the populace. One would therefore also think, would one not, that no one would more avidly embrace reliable prevention than those most opposed to solution after the fact? It didn't happen.

Why it didn't happen is that a certain segment of those so opposed think that such a handy and foolproof measure would foment frivolity, promiscuity, and philandering. On the chance you need filling in, the FDA is about to release an implantable five-year sustained-hormone-release contraceptive device called Norcept that is as near 100% effective as anything can be. It would appear to be the answer to the prayers of anyone seeking birth control. Precisely, says the American Life League; it will foment frivolity, promiscuity, and philandering. The League is therefore lobbying the Congress to halt FDA approval of the device so that there can be further hearings on the matter. After all, they say, there might be occasional failures, and anyhow, they opine, maybe it really doesn't prevent fertilization at all, but simply prevents implantation of the fertilized ovum, and so is really only another means of terminating pregnancy. So maybe they prefer abortion? No; what they prefer is chastity.

Did you ever hear the story of Heloise and Abelard? It either is or is not a pretty story, depending on how you look at it. They preferred chastity, too—or did until they met each other. In a highly uncivilized manner chastity was forced on them after a while—or at least it was forced on Abelard; chastity cannot be forced on a woman short of cutting off her head, though there is no indication that Heloise ever violated her vow. Others have violated such vows, both made and implied. Even the celebrated chastity belt failed on occasion.

The birds and the bees have no compunctions about such things; neither does the human species generally, particularly its young, once aroused. For those who would use that as an excuse to impose censorship on anything that would arouse, let me disabuse you right now: you will have to disconnect their brains, except in the male of the species, where disconnecting their hormone supply will suffice. Otherwise, forget it. If you include thinking lascivious thoughts, you can forget it, period.

Unquestionably, chastity outside of wedlock is the answer to that and all of the other consequences

either mentioned, implied, or unmentioned above. Satisfying, or even lusting to satisfy, one's urges in any other way, is, in fact, forbidden by God, in case you care. So are a lot of other things forbidden by God, among them self-righteousness, which has always occupied a very high place on God's list, if you believe the Bible. What God requires of man (generic; it includes men and women, boys, and girls) is perfection—in His eyes, not in yours and mine. Which is why knowledgeable Christians enthusiastically celebrate Christmas and Easter.

For those who don't subscribe to biblical wisdom and all, even reason would corroborate its conclusions about chastity outside of wedlock. But who listens to reason (or God, either, for that matter) when it comes to sex? A diminishing number of women, and even fewer men—even without Norcept, and even before the pill. Which gets us right back to where we were when I started all this. I might as well have kept my counsel. So, failing chastity, the FDA needs to get on with it.

J.B.T.



George Day Dodson Jr., age 74. Died December 2, 1990. Graduate of University of Tennessee College of Medicine. Member of Consolidated Medical Assembly of West Tennessee.

Carl Mallory Harwell Jr., age 78. Died November 22, 1990. Graduate of Tulane University School of Medicine. Member of Memphis-Shelby County Medical Society.

Ernest George Kelly, age 94. Died November 21, 1990. Graduate of Vanderbilt University School of Medicine. Member of Memphis-Shelby County Medical Society.

new members

The *Journal* takes this opportunity to welcome these new members to the Tennessee Medical Association.

COFFEE COUNTY MEDICAL SOCIETY Clifford Alan Seyler, M.D., Tullahoma

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

Dean Paul Currie, M.D., Jackson Jennifer Johnson, M.D., Jackson

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Small Cell Lung Cancer Presenting as a Pancoast Tumor

RONALD H. LANDS, M.D.; NIKHIL PATEL, M.D.; S. MARAN, M.D.; and ANAND KARNAD, M.D.

Introduction

Lung cancer is clinically divided into small cell lung (SCL) and non-small cell lung (NSCL) types because of divergent treatment considerations. Treatment for NSCL cancer is based on eradication of localized tumor with surgery and sometimes radiation, whereas SCL cancer is considered a systemic disease requiring combination chemotherapy as the basis of its treatment. This case illustrates the importance of histologic confirmation before treatment, given the presentation here of a SCL cancer in a manner considered typical of an NSCL cancer histology. A discussion and a literature review follow.

Case Report

A 59-year-old white male smoker had progressively worsening right shoulder pain for one month; the pain radiated from the neck toward the scapula and down the arm toward the elbow. Horner's syndrome and muscular atrophy of the right upper extremity were negative; a CBC was normal, and the only abnormality in the chemistry profile was an LDH of 258 U/L. Liver enzymes were normal. A chest x-ray revealed a right upper lobe mass with osteolysis of the right second rib (Fig. 1). A CT scan confirmed this finding and documented the absence of mediastinal nodes, liver metastasis or other metastatic disease. Fine-needle aspiration of the apical mass proved the tumor to be small cell carcinoma. Bone marrow aspiration and biopsy revealed no tumor. He is currently being treated with combination chemotherapy.

Discussion

Pancoast syndrome is a constellation of findings attributed to tumors involving the superior sulcus of the lung. Symptoms include pain in the shoulder, scapula, and arm radiating toward the elbow. Signs may or may not include muscle atrophy in the ip-

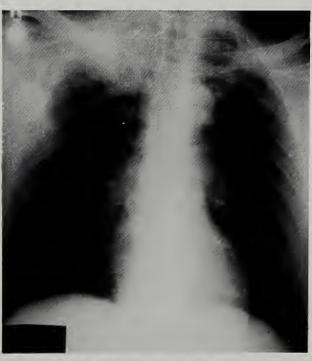


Figure 1. Chest x-ray showing the presence of a right apical lung

From the Department of Medicine, Division of Hematology-Oncology, Veterans Affairs Medical Center, and the James H. Quillen College of Medicine, East Tennessee State University, Johnson City.

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TABLE 1 HISTOLOGIC ETIOLOGY OF PANCOAST TUMORS: A LITERATURE REVIEW

	Total	Squamous Cell	Large Cell	Adenocarcinoma	Small Cell	Other
Paulson ²	61	24	19	9	0	2
Miller ³	26	17	6	3	0	
Wright ⁵	21	8	2	7	0	5
Attar ⁶	73	34	0	10	0	28
Stanford ⁷	53	14	18	21	0	
Shahian ⁸	18	4	1	12	0	1
Van Houtte ⁹	31	9	6	9	1	4
Komaki ¹⁰	36	14	9	3	2	8
Hilaris ¹¹	129	66		-63*	0	0

^{*}Large cell and adenocarcinomas were reported as one group

silateral extremity or Horner's syndrome. X-ray findings may be subtle unless there is involvement of a rib by contiguous invasion.1

While the original descriptions of this syndrome were not attributed to lung cancer, it is now considered almost synonymous with bronchogenic carcinoma.1 The association of an apical abnormality with pain radiating in a distribution from the lower cervical and upper thoracic nerve roots is believed to represent cancer 90% of the time.² In situations where histology is inaccessible, or there is a desire to leave tissue planes inviolate, it is considered reasonable to treat with radiation therapy without a tissue diagnosis.3

Epidermoid carcinoma accounts for approximately 40% of the Pancoast tumors reported in the papers we reviewed (Table 1). Large cell and adenocarcinomas as a group account for another 40%. SCL cancer accounts for less than 1% of all presentations of Pancoast tumors. Conversely, only one institution has reported the incidence of Pancoast tumors occurring in a population of patients with SCL cancer. Johnson et al4 reported four cases of SCL cancer occurring as Pancoast tumors out of a population of 89 patients diagnosed over a period of one year.

Because of its propensity for the rapid development of distant metastasis in the face of limited disease, surgery and radiation therapy given alone are considered inadequate therapies for SCL cancer. Combination chemotherapy is the only measure that has been shown to improve the median survival in patients with this disease.¹²

Pancoast syndrome may rarely be caused by SCL cancer. Since local measures, such as surgery or radiation therapy, would reasonably be expected to fail even in a patient with limited disease, an accurate histologic diagnosis is important to define the proper treatment.

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The Effect of Determining Transfer Status on Nursing Home Patients In East Tennessee

ANGELA SIRETT, M.D.; FORREST LANG, M.D.; and DAVID G. DOANE, M.D.

Introduction

The determination of hospital transfer status for seriously and terminally ill patients of nursing homes has been advocated in the recent literature. 1,2 No assessment of the impact of these determinations in the clinical setting has been published, however.

Hospital transfer status is a determination independent of the decision for or against resuscitation. While attention to "Do Not Resuscitate" (DNR) orders may be paramount in the hospital,³⁻⁹ ability to identify and manage acute cardiac/respiratory arrest is sharply limited in many nursing homes, particularly intermediate care facilities. Therefore, the decision of whether or not to transfer the patient to the hospital may be the decision of primary importance to the nursing home. Unlike the DNR order, the "Do Not Hospitalize" (DNH) order addresses the issue of transfer to the acute care facility of patients who might be better served in terminal phases of their illness at a more familiar facility with a lesser capability for invasive procedures. Consideration of the DNH order requires decision-makers to evaluate whether or not therapeutic and diagnostic benefits of inpatient treatment will outweigh the adverse effects that hospitalizations may have on the patient. These unfavorable repercussions include confusion associated with a change in surroundings, the discomfort involved in many hospital procedures, the stress of being cared for by an unfamiliar group of nurses and physicians, and the perception of the hospital as a place where one goes to die. Other undesirable consequences of hospitalization for the elderly include greater numbers of falls, nosocomial infections,

and adverse drug reactions.1 Without such a transfer status determination, patients at the end of life are frequently transferred to the hospital whenever the nursing home staff perceives a serious or lethal condition beyond the medical therapeutic capabilities of the nursing facility. With intensive hospital intervention some of these patients survive the acute crisis, leading to transfer back to the nursing home, often to repeat the cycle until it ends in death, usually in the hospital.

Recently, an effort was initiated to determine code status and hospital transfer status of patients deemed to be at the end of life at two Jonesborough, Tennessee, intermediate care nursing facilities. This paper examines the effects of this initiative. The study addresses the following questions:

- What effect has the new policy had on hospitalization rate and death rate of the nursing home residents?
- What are the differences in characteristics of patients approached to discuss DNH orders and those not approached?
- Who participated in the DNH decisions, and what was their decision when approached?
- What effect has the new policy had on nursing home staff?

Methods

Determination of hospital transfer and resuscitation status on patients deemed at the end of life began in August 1984, when the faculty of the Department of Family Medicine at the James H. Quillen College of Medicine assumed the medical directorship of the two intermediate care nursing facilities.

The designation "DNR" meant that no efforts would be made to revive a patient whose heart or respirations had stopped; it did not limit supportive care. The designation "DNH" meant that if a patient

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TRANSFER STATUS/Sirett

became acutely ill, he would receive maximum supportive and therapeutic care at the nursing home, but would not be transferred to the hospital unless the patient, family, or physician withdrew the order.

Selection of patients to be so approached was made during twice weekly care rounds by one of two physicians and the nursing staff. The determinations were made when deterioration in a severely impaired patient raised the question of hospitalization. With patients who clearly had terminal illness, e.g., cancer, the determination was made at the earliest appropriate moment in the nursing home stay. For patients whose condition warranted discussion of transfer and resuscitation status, competency was first assessed by referral to previous determination as documented on the admission note or by mini-mental status examination. For incompetent patients this discussion took place with the designated guardian. Incompetent patients capable of some communication were included in the discussion. It should be noted that this selection is similar to that suggested by Charlson, 10 who recommended making such a determination on patients who are steadily deteriorating. The process of periodic review is similar to that used by Besdine and his staff.1

For patients so identified, one of us (F.L. or D.D.) would describe the state of disability, deterioration, and overall prognosis. The likelihood of an acute serious illness requiring a decision on the preferred location of care was then established. The difference between an approach aimed at maximizing survival was then contrasted with an approach aimed at maximizing comfort. The impact of transfer to the hospital on comfort was outlined, and the limits of therapeutic intervention in the nursing home were described, including the possibility of an earlier death. The decision of the patient or family was noted in the chart, corresponding orders were written, and the patient's transfer and resuscitation status were displayed prominently on the problem list and on the front of the chart.

In order to study the impact of these decisions, the records of two nursing homes were reviewed for a two-year period (Aug. 1, 1983 through July 31, 1985). The study sample was divided into two groups, those residing in the nursing home the year before intervention (Aug. 1, 1983 through July 31, 1984), and those residing in the nursing home the year after intervention (Aug. 1, 1984 through July 31, 1985). One hundred thirty-two residents lived in the nursing home both years, and were included in each group.

Demographic data, admitting diagnosis, hospitalization information, mental status, and reason for discharge from the nursing home were gathered for each of the 384 nursing home subjects from physicians and nursing notes and from the nursing home admission papers. The patients in the nursing home before and after the intervention were then compared for possible secular differences in age or diagnosis. Statistical comparison used standard t-test and z-test for proportions. Diagnoses were divided into 11 major categories: cancer, CNS neurologic disorder, respiratory disorder, gastrointestinal or genitourinary disease, infection, arthritis, fracture, osteoporosis, dementia, Alzheimer's disease and other related disorders, and alcohol and drug abuse. Residents with more than one diagnosis were assigned to all applicable diagnostic groups. The number of hospitalizations and the number of deaths in the nursing homes were determined for each year.

In addition, the postintervention 1984-1985 group was subdivided into two subgroups: those approached to determine DNH/DNR orders, and those not approached. The two groups were compared as to age, mental status, diagnosis, and number of previous hospitalizations while at the nursing home. It was also determined by chart review who participated in the DNH/DNR decision.

Eight nurses employed at the nursing homes were interviewed to see what effect the new policy had on the nursing staff. A structured interview was used that addressed perception of change and emotional reactions to those changes.

Results

The population demographics during Aug. 1, 1983 through July 31, 1984 (preintervention) were compared to the population demographics between Aug. 1, 1984 through July 31, 1985 (postintervention). Standard statistical tests revealed no significant differences in age, sex, or diagnosis of nursing home

TABLE 1
PARTICIPANTS IN DETERMINATION OF STATUS

	Frequency	Percentage
Family only (patient competent)	0	0
Family only (patient incompetent)	12	46.1%
Patient only	2	7.7%
Family and patient	4	15.4%
Physician only (no family, patient incompete	ent) 6	23.1%
Undetermined	2	7.7%
TOTAL	26	100.0%

residents between the preintervention and postintervention periods. Between August 1983 and July 1984 there was a total of 196 patients in the two nursing homes, with 76 admissions and 64 discharges. Between August 1984 and July 1985 there was a total of 188 patients, with 56 admissions and 56 discharges; 132 patients resided in the nursing homes during each of the two time periods.

Do Not Hospitalize. During the year prior to the intervention, no patients had orders written to limit transfer to the hospital. Of the 188 patients residing in the two nursing homes during the year of the intervention, 26 were approached to determine their DNH/DNR status (13.8%). All 26 chose no resuscitation in the event of cardiac arrest (DNR). Twenty-five also chose to receive maximum medical and supportive care in the nursing home but not be transferred to the hospital for more intensive intervention in the event of a life-threatening change (DNH). One patient chose maximum hospital care short of cardiopulmonary resuscitation. Nineteen of the 25 (76%) DNH patients died during the one-year study period, all in the nursing home.

Participants in Decision-Making. Those who participated in the decision-making are noted in Table 1. Decision-makers were documented in 92.3% of the DNH/DNR cases. Involvement of patients and their families was indicated in the records of 69%.

In 23.1% of cases the patient was incompetent and no family was available. In these cases the physician, in consultation with the nursing staff, made the determination in lieu of the family. In 7.7% of cases, review of charts could not determine what input the family had in the decision.

Patients Selected for Determination of Transfer Status. Patients choosing not to be transferred tended to be older, to have a more serious diagnosis, such as cancer and heart disease, and to have a lower mental status than other nursing home patients (Table 2). These patients also had more previous hospitalizations while in the nursing home than the other nursing home patients. It should be noted that only 18% of these patients had terminal illness, i.e., cancer. The typical patient choosing not to be transferred had both severe cardiovascular disease and end-stage Alzheimer's disease, and had experienced several previous hospitalizations with minimal improvement; their deterioration led to a bad but poorly defined prognosis for survival, coupled with a distinctly negative quality of life.

Hospitalization. The hospitalization rate decreased by 11% the year after intervention when compared to the year before. Sixty-eight hospitalizations occurred during the year before intervention, whereas there were 58 hospitalizations the year after intervention; this decrease is not statistically significant (P=.05).

Death Rate and Location. There was no significant difference in the number of deaths between the preintervention and postintervention periods (Table 3); 31 out of 196 patients died during the year before intervention, while 40 out of 188 died the year after. Significant differences, however, were noted in comparing the location of death (P=.0001); during the preintervention period, 13 of 31 deaths occurred in the nursing home (41.9%), whereas during the postintervention period, 32 of the 40 deaths (80%) occurred in the nursing home. The proportion of deaths in the hospital decreased from 58.1% to 20%

TABLE 2

COMPARISON OF DNH RESIDENTS WITH OTHER NURSING HOME RESIDENTS

Patient Characteristics Between Aug. 1, 1984 through July 31, 1985	DNH Residents	Other NH Residents	P
Number of patients	25	160	
Average age in years	84.78±7.42*	78.39±10.40*	.0001
Mental status			
Mildly disoriented	5 (20%)	64 (39.8%)	
Moderately disoriented	7 (28%)	61 (37.9%)	.005
Severely disoriented	13 (52%)	35 (21.7%)	
Number of previous hospitalizations while at nursing home	29	88	
Average hospitalizations per patient	1.16	.547	.0001
Diagnosis			
Cancer	5 (18.5%)	8 (5.0%)	.01
Cardiovascular	14 (51.9%)	61 (37.9%)	NS
Dementia, Alzheimer's	20 (74.0%)	101 (62.7%)	NS

^{*}Standard deviation.

after the intervention (Fig. 1). As previously noted, 19 of the 25 patients electing no transfer died in the nursing home during the year of intervention.

Effect on the Nursing Home Staff. In the preintervention year, only 13 patients died in the two nursing homes; this amounts to one death per shift every five to six months. After intervention, the number of deaths in the nursing home increased by 146%, and the likelihood that the nurses would have to deal with a nursing home death increased to one death per shift every two to three months. Interviews with selected members of the nursing home staff indicated strong support for the new policy, but also revealed that the staff had difficulty in dealing with their emotions in response to the increased death rate in the nursing home. Statements such as, "I can accept death, but I feel a lot of pain," "Seeing people suffer and die with cancer and heart disease makes me realize that anything can happen to me ... life doesn't go on forever," and "After a patient dies, I have a hard time sleeping and eating" were common.

Discussion

This study revealed several effects of determining the hospital transfer status of nursing home patients who had terminal illness or who faced a dramatic downhill course. Most of these effects were beneficial, but some of them raise important questions or problems that need to be confronted.

The foremost benefit must have been to the patients themselves and their families, who were able to make a choice regarding the level of medical intervention to be provided, as well as to where the patient died. Most families seemed to readily understand the ideal of providing maximal supportive care when they were counseled about these issues, and responded with expressions of appreciation and relief. It is notable, however, that while most of the patients approached preferred to receive maximum supportive care while remaining in the nursing home,

TABLE 3
HOSPITALIZATIONS AND DEATHS

Pi	reintervention	Postintervention	P
Total number of deaths At nursing home At hospital Total number of hospitalizati	31	40	NS
	13 (42%)	32 (80%)	.0001
	18 (58%)	8 (20%)	.0001
	ons 68	58	NS

none took the initiative for approaching nurses or physicians about this possibility.

It also seems that this approach to breaking the cycle of repetitive hospitalization for nursing home patients nearing the end of their lives had benefits for hospital medical staff. Although the only evidence is anecdotal, a previous criticism often heard from housestaff regarding inappropriate "hospital dumps" from the nursing home just about ceased during the study period.

The nursing home staff also spoke highly of the new approach, despite the large increase in nursing home deaths. One cautionary note was introduced by an increase in calls made by staff to physicians during the intervention period requiring reassurance about the DNH decision. These calls, which reflected nursing uncertainty and possible self-perceived guilt, were dealt with sympathetically. Emotional reassurance enabled the nursing home staff to gain a greater sense of pride in their ability to help their patients up until their death.

At the same time, there are potential risks in initiating a policy of determining hospital transfer status. The most obvious is the ever-present risk of failing to transfer patients who might benefit from maximum aggressive hospital care. Care needs to be taken, especially, in determining DNH/DNR orders for patients who may be suffering from depression, misunderstanding, lack of informed consent, or unrealistic impressions of the invasiveness of certain hospital procedures.¹¹ The physicians involved in this study were well aware of these dangers, and consciously worked to minimize such risks. Such risks might also be minimized through routine use of appropriate psychological tests, such as the Beck Depression Scale and the Fulstein Mini-Mental Status Examination, as adjuncts to the determination of hospital transfer status procedures.

The risk of inappropriately failing to transfer patients to the hospital might be increased in situations where time constraints and patient numbers diminish the doctor/patient relationship. It is also conceivable that in some situations there could be pressures to more vigorously pursue no-transfer orders for patients with poor insurance coverage than for patients with more adequate coverage. Nursing home administrators might perceive a further risk if an increase in nursing home deaths were to raise quality care issues in their local communities or among funding or regulatory agencies.

This study illuminates a set of issues related to procedures for determining hospital transfer status of nursing home patients who are in need of further study and thought. These include such issues as the

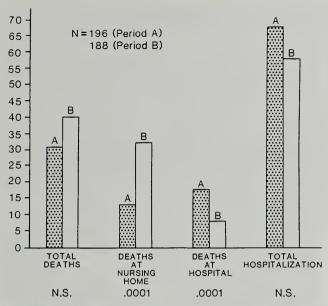


Figure 1. Comparison of hospitalizations and deaths during preintervention (A) and postintervention (B).

selection of patients and the timing of the discussion. What, for example, is the desirability of determining code and transfer status on all patients, as opposed to selectively determining it in those who are seriously ill? The high rate of patients approached in this study choosing to elect a no transfer status (25/26) reflects the physicians' selection of only patients with the poorest prognosis and quality of life. The physicians did not approach patients or families regarding this decision unless they, themselves, were comfortable with the decision to limit aggressive medical intervention. Yet, postponing the decision to this stage often makes it difficult to accurately include the values and beliefs of the individual involved because of incompetence or a clouded sensorium.

These risks are balanced, on the other hand, by understandable reticence on the part of patients, families, or nursing home administration to discuss decisions about death at the time of admission to the nursing home. Implicit economic issues as well as

potential guilt related to the appearance of family abandonment may threaten the appropriateness of decisions. Some families, furthermore, might choose DNH orders in cases where the physician might be uncomfortable managing the patient under these limiting constraints. Subsequent conflict over these differences could place the family, physician, and nursing home in adversarial roles. These are serious and perplexing issues that are in need of further consideration and study.

There is a related need for more study, discussion, and guidance regarding the determination of code and hospital transfer status among the large number of nursing home patients who are profoundly demented and deteriorating medically, but who are not terminal, particularly when they lack a family. 12-17 The large gulf that exists between court rulings, academic teaching, and practical reality needs to be narrowed.

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Malignant Melanoma Arising In a Congenital Nevus

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Introduction

Congenital melanocytic nevi (CN) are defined as melanocytic nevi, or moles, present at birth.¹⁻³ They are present in 1% of newborns and vary in size from lesions less than 3 cm to lesions that cover large por-

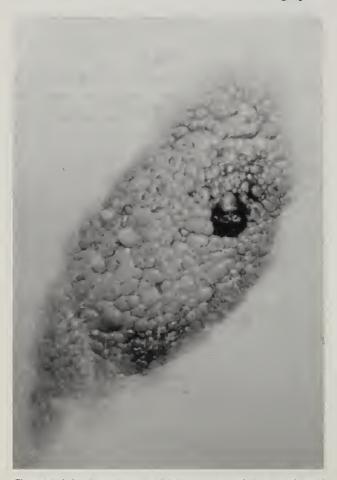


Figure 1. A 9×4 -cm verrucous light brown congenital nevus situated on the right shoulder posteriorly has a 1-cm black nodule and a second 0.4-cm black area within it. Biopsy of the nodule demonstrated malignant melanoma.

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tions of the skin surface (giant CN).¹ CN are potential precursors of malignant melanoma. Melanoma may appear in CN during childhood or at any age. We report the occurrence of an advanced primary cutaneous melanoma in a congenital melanocytic nevus on the shoulder of a 67-year-old woman. Patients with CN and clinicians should be aware of the potential risk for developing malignant melanoma. Although close clinical follow-up of CN may identify early malignancy, prophylactic surgical excision may also be used to prevent melanoma in CN.

Case Report

A 67-year-old woman sought medical attention for change in color and bleeding of a large nevus on her right shoulder posteriorly. The nevus, known to be present since early childhood, had been recognized as changing only two weeks previously; the patient thought the change was due to local trauma. She had irradiation for cervical carcinoma 11 years ago. There was no family history of malignant melanoma.

A 9×4.0 -cm raised, pink-tan, verrucous nevus with large hairs was present in the right posterior deltoid region (Fig. 1). Toward one end of the lesion was a 1-cm black, irregularly demarcated area, and another 0.4-cm black area was situated within the nevus 3 cm from the larger one. A punch biopsy of the larger black area showed malignant melanoma, invasive through the reticular dermis (Clark's level IV) and to a measured depth of at least 4 mm (Breslow). No other pigmented skin lesions were present on physical examination. No

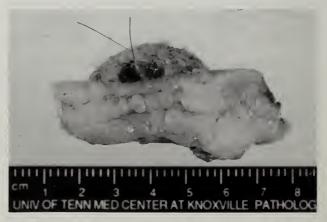


Figure 2. A section through black nodule in the surgical specimen shows a melanocytic tumor within the nevus. This tumor extends through the dermis and into the subcutaneous fat.



Figure 3. The excision specimen has malignant melanocytes present along the dermal-epidermal junction and forming large aggregates within the dermis. These melanoma cells are surrounded by nevus cells and extend into the subcutaneous fat (hematoxylin-eosin, $\times 2.5$).

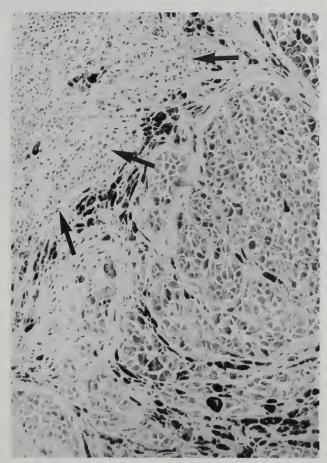


Figure 4. The melanoma cells are large, have abundant pigmented cytoplasm, have large vesicular nuclei, and form large aggregates within the dermis. These melanoma cells are quite distinctive in appearance from adjacent nevus cells (arrows) (hematoxylin-eosin, × 20).

adenopathy or organomegaly was detected. Computerized tomography of the head, neck, thorax, abdomen, and pelvis was negative for metastatic disease.

The lesion was surgically excised with 1.5-cm margins surrounding the nevus and closed primarily. Sections through the surgical specimen showed distinct areas of black discoloration within the verrucous areas, which grossly extended through the dermis (Fig. 2). Histopathologic examination of these areas showed malignant melanoma, superficial spreading type (Figs. 3-5), invasive to the subcutaneous fat (Clark's level V) and to a measured depth of 10 mm (Breslow), arising in a congenital dermal nevus. The grossly detected separate black area within the lesion represented a dermal deposit of malignant melanoma consistent with a satellite metastasis.

At six months the patient developed right axillary lymph node metastases, confirmed by axillary dissection.

Discussion

The recognition of a nevus as congenital may be based upon documentation by family members, by the clinical appearance of the nevus, and by histopathologic findings. A patient's mother or father may remember the presence of a mole at birth, and photographs may document a mole's existence in infancy. These are the most reliable criteria for confirming the presence of a nevus at birth.

Aside from historical documentation, the clinical appearance of a nevus may be strong evidence of its congenital origin. The vast majority of benign nevi larger than 1.5 cm may be considered congenital²; the surface may be rugose or verrucous, sometimes having a likeness to animal skin. Large, dark hairs may or may not be present. The color may vary from light brown to dark brown or black, but the pigmentation should be uniform, and the borders of the lesion should be sharply defined. Variegation of coloration within a nevus, irregularity of borders, ulceration or bleeding, and the appearance of a nodule are abnormal features that may herald malignancy.

Histopathologically, CN may have characteristic appearances.^{1,4,5} Typically they are broad lesions with melanocytes extensively involving the dermis and at times the subcutaneous fat. Nevus cells may be found within skin appendages such as hair follicles, nerves, sebaceous glands, and arrector pili muscles. In large CN, melanocytes may extend to involve deep soft tissues and even the leptomeninges. Melanoma in a CN may occur within the epidermis,



Figure 5. Malignant melanocytes in characteristic nests (arrows) associated with pigment-laden macrophages (hematoxylin-eosin, \times 40).

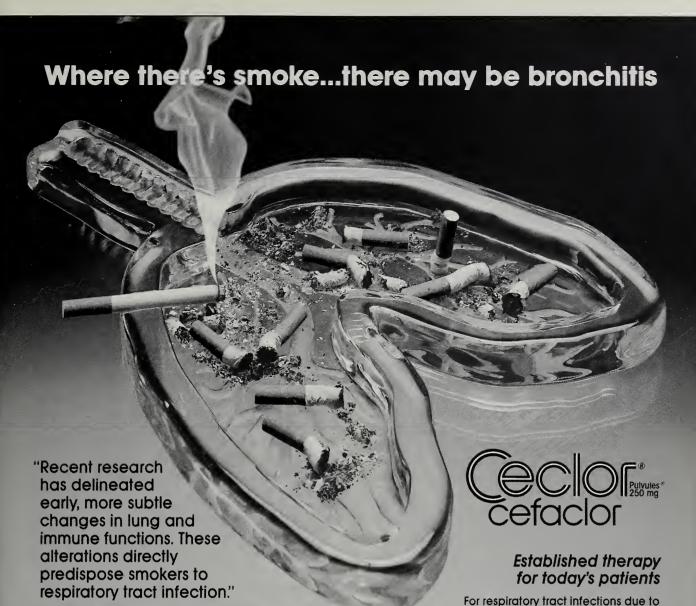
dermis, or both. It is recognized histologically within the nevus as a distinct population of melanocytic cells that have malignant cytologic features and grow in a pattern distinct from the surrounding benign nevus cells. Melanoma cells in CN often form expansile nodules in the dermis. The lifetime risk of developing melanoma in a large CN is estimated to be at least $6.3\%^{2.6.7}$ and in small CN may be as high as $4.9\%^{1,3,6}$ The relative risks are 17-fold^3 and 3- to 21-fold^2 respectively. When melanoma occurs in very large CN, the malignancy appears between the ages of 3 and 5 in about half of the patients.³ Melanoma in small CN typically appear later in life.

CN may be recognized by educated patients and clinicians. Although the risks for malignancy are estimates, they are not insignificant. If CN are not surgically removed, they should be followed by the patient and physician, ^{2,8,9} and if any changes occur, biopsy or excision is indicated. If melanoma occurs in a CN, treatment should be based upon histologic and clinical staging. Proper observation and treatment of CN should diminish the likelihood of patients with CN developing advanced melanoma as the patient in this presentation did.

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Am Fam Phys 1987;36:133-140

Brief Summary.

Consult the package literature for prescribing information. Indication: Lower respiratory infections, including pneumonia, caused by Streptococcus pneumoniae, Haemophilus influenzae, and Streptococcus pyogenes (group A p-hemolytic streptococci).

Contraindication: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS. INCLUDE ANAPHYLAXIS

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

- anniholde treatment, possibly resulting in antibioticassociated colitis.

 Precautions:

 Discontinue Ceclor in the event of allergic reactions to it.

 Prolonged use may result in overgrowth of nonsusceptible organisms.

 Positive direct Coombs' tests have been reported
 during treatment with cephalosporins.

 Ceclor should be administered with caution in the
 presence of markedly impaired renal function. Although
 dosage adjustments in moderate to severe renal
 impairment are usually not required, careful clinical
 observation and laboratory studies should be made.

 Broad-spectrum antibiotics should be prescribed with
 caution in individuals with a history of gastrointestinal
 disease, particularly colitis.

 Safety and effectiveness have not been determined in
 pregnancy, lactation, and infants less than one month
 old. Ceclor penetrates mother's milk. Exercise caution
 in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

Hypersensitivity reactions have been reported in about 1.5% of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions have been reported with the use of Ceclor. These are characterized by findings of erythema multiforme, rashes, and other skin manifestations accompanied by arthritis/arthralgia, with or without fever, and differ from classic serum sickness in that there is infrequently associated lymphadenopathy and proteinuria, no circulating immune complexes, and no evidence to date of sequelae of the reaction. While turther investigation is ongoing, serum-sickness-like reactions appear to be due to hypersensitivity and more reactions appear to be due to hypersensitivity and more often occur during or following a second (or subsequent) course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults with an overall occurrence ranging from 1 in 200 (0.5%) in one focused trial to 2 in 8,346 (0.024%) in overall clinical trials (with an incidence in children in clinical trials of 0.055%) to 1 in 38,000 (0.003%) in spontaneous event reports. Signs and symptoms usually occur a few days after initiation of therapy; occasionally these reactions have resulted in hospitalization, sistally of short duration (median hospitalization = two usually of short duration (median hospitalization = two to three days, based on postmarketing surveillance studies). In those requiring hospitalization, the symp-toms have ranged from mild to severe at the time of sion with more of the severe reactions occurring in children. Antihistamines and glucocorticoids appear to enhance resolution of the signs and symptoms. No serious sequelae have been reported.

· Stevens-Johnson syndrome, toxic epidermal necrolysis,

and anaphylaxis have been reported rarely. Anaphylaxis and anaphylaxis have been reported rarely, Anaphylaxis may be more common in patients with a history of penicillin allergy.

• Gastrointestinal (mostly diarrhea): 2.5%

• Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.

• As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.

• Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.

• Other: eosinophilia 2%; nentral prunitus or vaginitis

susceptible strains of indicated organisms

Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1% and, rarely, thrombocytopenia and reversible

less than 1% and, rarely, thrombocytopenia and reversible interstitial nephritis.

Abnormalities in laboratory results of uncertain etiology.

Slight elevations in hepatic enzymes.

Transient lymphocytosis, leukopenia, and, rarely, hemolytic anemia and reversible neutropenia.

Rare reports of increased prothrombin time with or without clinical bleeding in patients receiving Cector and Coumadin concomitantly.

Abnormal urinalysis; elevations in BUN or serum creatinine.

Positive direct Coombs' test.
 Palse-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest* tablets but not with Tes-Tape* (glucose enzymatic test strip, Lilly).
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Continuous Arteriovenous Hemofiltration With Dialysis in the Management of Acute Renal Failure Following Trauma

JAMES V. LEWIS, M.D.; MICHAEL A. STEIN, M.D.; and STEPHEN K. WILSON, M.D.

Introduction

Deterioration of kidney function progressing to acute oliguric renal failure (AORF) can occur in the traumatized patient despite aggressive resuscitation and appropriate post-injury care. Wartime experience has been used to project the expected incidence of this complication in the civilian population. During the Vietnam conflict the incidence of acute renal failure following severe trauma was approximately 0.15%.^{1,2} The mortality, despite the use of hemodialysis, was 77%.² Management of AORF with either intermittent hemodialysis or peritoneal dialysis has often been unsatisfactory. Continuous arteriovenous hemofiltration (CAVH) and continuous arteriovenous hemofiltration with dialysis (CAVHD) are new treatment modalities that have proven effective for these patients.³

Case Report

A 60-year-old white man was thrown through the windshield of his truck when it was involved in a single vehicle accident. He had a Glascow Coma Score of 15 and a Trauma Score of 16 upon arrival at the trauma center. His injuries included extensive facial fractures, a small right pneumothorax, and a large laceration about the right knee. His airway was not compromised; an initial arterial blood gas, however, showed severe hypoxia and he was intubated and placed on a ventilator. Shortly after admission to the emergency room he became mildly hypotensive, but his blood pressure responded promptly to fluid administration. The pneumothorax was treated with a chest tube. A CT scan of the head and face demonstrated comminuted fractures of the right orbital rim and zygoma. A diagnostic peritoneal lavage was negative.

The patient was taken to the operating room for stabilization of his facial fractures, packing of his nose to control continued bleeding, tracheostomy, and debridement of the knee wound.

Postoperatively the patient again became hypotensive, with a low cardiac output and low systemic vascular resistance. There was improvement with additional fluids and inotropic support. An echocardiogram failed to show any evidence of myocardial damage.

From the Division of Trauma Surgery, James H. Quillen College of Medicine, East Tennessee State University, Johnson City.

Progressive oliguria developed during the next five days. The BUN rose from an initial value of 14 to 87 mg/dl, with a concomitant rise in the creatinine to 7.8 mg/dl; the potassium was well controlled. CAVHD was started at that time.

Over the following five days the patient tolerated this therapy well; his BUN stabilized at 60 mg/dl and his creatinine at 3.9 mg/dl. He received total parenteral nutrition at a level calculated to meet his increased metabolic needs. The additional fluids that were required were removed as CAVHD ultrafiltrate.

By the tenth post-injury day there was renewed evidence of cardiac pump failure resistant to increasing inotropic support. Cultures of the blood, sputum, and knee and facial wounds were positive for *Pseudomonas*. Continued aggressive treatment was of no avail, and the patient died five days after the CAVHD was begun. It was assumed that the cause of death was overwhelming sepsis and multiple organ failure.

Discussion

As demonstrated in this patient, AORF may follow trauma, with a number of possible precipitating factors, such as episodes of hypotension and sepsis. When established, AORF can be particularly difficult to treat with modalities better designed for managing chronic renal failure.

The post-injury patient with AORF is often hyperdynamic, with an increased cardiac output and systemic oxygen consumption. If sepsis is present, support with inotropic drugs is frequently required. Vascular instability with marked sensitivity to volume shifts can occur, and, as is often the case, fluid rapidly removed during classic, intermittent hemodialysis must be replaced to support a falling blood pressure.

Peritoneal dialysis is many times not feasible, as the abdomen has been involved in the trauma or is the site of a septic focus.

Acute renal failure patients have a better survival if they are supported with adequate nutrition.⁴ In addition, the traumatized patient is hypermetabolic, and requires a significant number of additional calories. Total parenteral nutrition, even if given in a concentrated form, often means giving unacceptably large volumes of fluid to these already overloaded patients.

In 1977 Kramer et al⁵ described CAVH as a means of managing oliguric renal failure. The arterial venous pressure gradient is used as a driving force to produce an ultrafiltrate of plasma water and some dissolved solutes; protein and cellular components of the blood do not pass through the filter. Hypervolemia can be effectively treated in this manner; azotemia, however, is not affected. This later problem was addressed in 1984 by Geronemus and Schneider⁶ when they developed CAVHD.

With CAVH and CAVHD no mechanical pumping device is required. A large-bore catheter is placed in an artery, usually the femoral, to provide a suitable flow of blood to the filter. We have used the Hospal filter, a device with 15 parallel plates made of polyacylonitrile (PAN). These PAN plates separate a blood compartment from a collection or ultrafiltrate compartment. The PAN membrane is "leaky" in that it has pores that allow the passage of plasma proteins smaller than 50,000 Daltons. The ultrafiltrate, formed by the transmembrane pressure gradient and the "leaky" characteristics of the membrane, passes into a graduated collection compartment. After passing through the filter the blood is returned to the body via a venous catheter usually placed in the femoral vein.

The Hospal filter has ports that allow a dialyzing solution to enter, pass over the PAN membrane on the ultrafiltrate side, and then exit for measurement. This adds the element of dialysis to CAVH. Solutes move across the filter into the ultrafiltrate compartment by a diffusion gradient established by the concentration differential between blood and the dialysate.

CAVH is most useful in removing excess water and normalizing elevated serum potassiums. Elevated blood urea nitrogen, creatinine, and other by-products of azotemia are effectively reduced to manageable levels by CAVHD.

The complications of CAVH and CAVHD relate to

problems with the filter and with the arterial and venous access sites. Careful attention must be paid to the volume and chemical characteristics of the ultrafiltrate removed. Typically, the volume removed less 100 ml is replaced hourly with a solution calculated to prevent electrolyte imbalance. In this way approximately 2,400 ml of free water can be removed daily. Systemic heparinization is seldom necessary, and is undertaken only if clotting of the filter is frequent. Under usual circumstances the filter can be used for three to four days before a change is required.

Since large catheters must be placed for venous and arterial access, injury to vessels with subsequent thrombosis can occur. There is also a risk of local infection at the access sites.

The nurses responsible for patients undergoing CAVHD have needed little additional training, and, because of the slow, continuous nature of the process, do not require close physician supervision.

In summary, CAVH and CAVHD are effective methods of managing AORF, particularly with the multiply-injured patient. Information as to whether the overall mortality of this complication will be reduced by this form of treatment is not yet available.

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APRIL 1991						
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Heparin-Induced Hyperkalemia

Case Report

A 65-year-old black man was admitted to the hospital with sudden onset of left-sided weakness and slurred speech. The physical examination revealed an incomplete left hemiparesis, and the diagnosis of a right parietal lobe cerebral infarction was made and subsequently confirmed by CT scan. He was given aspirin and, because he was bedridden, subcutaneous heparin, 5,000 units twice daily. His hospital stay was prolonged and his rehabilitation slow. He continued to be non-ambulatory and his subcutaneous heparin therapy was continued.

On the 50th hospital day when his potassium level was found to be 7.9 mmol/L, he was immediately transferred to the intensive care unit for cardiac monitoring. Review of laboratory data obtained early in the hospital course revealed a normal serum potassium level. A second sample of venous blood revealed a serum sodium of 132 mEq/L, potassium 8.0 mEq/L, chloride 109 mEq/L, bicarbonate 15 mEq/L, and creatinine 1.3 mg/dl. His hematocrit was 45%, and platelet count 347,000/cu mm. Physical findings were unchanged. The ECG revealed mildly tented T waves, but was otherwise unchanged from admission. Review of the medication record revealed that the patient had continued to receive heparin and aspirin, but was not receiving oral or parenteral potassium supplements. He had a history of heavy ethanol use, but no previous medical illness.

Heparin was discontinued, and intravenous dextrose, insulin, calcium, and sodium bicarbonate were administered, as well as potassium binding resin orally. The serum potassium fell to normal over a period of three days, and remained so without therapy for the remainder of the patient's stay on the medical service.

Presented by Gary Margolies, M.D., chief medical resident, Nashville Veterans Administration Hospital.

Discussion

Heparin therapy by both subcutaneous and intravenous routes is known to cause hyperkalemia, and its administration predictably results in decreased secretion of aldosterone.1 It is postulated as being due to inhibition of steroidogenesis and is specific for mineralocorticoid synthesis. Prolonged administration has also been associated with atrophy of the zona glomerulosa.2 Hyperkalemia develops as aldosterone levels decrease, resulting in sodium wasting and potassium sparing. While all patients receiving heparin can be expected to have some inhibition of aldosterone production, clinical hyperkalemia is rare, likely due to a compensatory rise in plasma renin activity with maintenance of adequate aldosterone levels in patients who have an otherwise intact renin-adrenal axis. Patients with an impaired axis are most at risk for developing hyperkalemia. This includes patients on prolonged therapy for zona glomerulosa atrophy and those with renal insufficiency. Underlying hyporeninemic hypoaldosteronism, which occurs in diabetes mellitus, seems to significantly increase the risk for heparin-induced hyperkalemia.3 Due to the presumed readily reversible effect on the adrenal gland, withdrawal of heparin therapy usually causes prompt resolution of hyperkalemia.

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A Toxic Cause of Chest Pain

Case Report

A 62-year-old man was transferred to Vanderbilt Hospital after a prolonged episode of chest pain. He had had a myocardial infarction in 1974, but had done well since, without further chest pain, until the evening before admission. After lying

Presented by Kathleen Maletic Neuzil, M.D., Hugh J. Morgan chief medical resident, Vanderbilt University Hospital, Nashville.

down to sleep, the patient had a severe headache, nausea, vomiting, tightness of his chest, and diaphoresis. He went to a local emergency room where his symptoms resolved without treatment. He felt well the following day, but his symptoms recurred on the evening of admission, and included a five-hour episode of chest tightness. His wife also complained of nausea and headache. Supplemental oxygen therapy in the ambulance relieved his pain. In the emergency room, his carboxyhemoglobin level was over 20%. The patient and his wife had

recently started using a gas water heater situated just outside their bedroom, and it was considered to be the source of carbon monoxide.

One hundred percent oxygen was administered, and the patient was transferred to Vanderbilt. He felt well on arrival, and his physical examination was normal. ECG revealed nonspecific T-wave flattening in the anterior and lateral leads. Arterial blood gas analysis while breathing 100% oxygen showed pH 7.41, Pco₂ 38 mm Hg, and Po₂ 339 mm Hg; the serum carboxyhemoglobin level was 4.4%. He was admitted to a monitored bed and had no further symptoms. Myocardial infarction was ruled by ECG and isoenzymes. He received 1.5 hours of hyperbaric oxygen therapy the next morning. A radioventriculogram with exercise performed before discharge was normal.

Discussion

Carbon monoxide (CO) is a nonirritating, tasteless, colorless, odorless gas that is produced when organic materials are incompletely burned. Common sources of CO include fires, automobile exhaust fumes, and faulty heating and cooling equipment. Methylene chloride, a component of paint and varnish removers, may be converted to CO. Toxicity from these sources is increased by inadequate ventilation and inadequate air-fuel mixtures. CO intoxication is the leading cause of death due to poisoning in the United States, and causes significant morbidity as well. 1,3

CO exerts its deleterious effects by causing tissue hypoxia. The lungs rapidly absorb CO, which then binds to hemoglobin to form carboxyhemoglobin. The affinity of hemoglobin for CO is 200 times that for oxygen. CO also impairs the release of oxygen from hemoglobin, resulting in further tissue hypoxia.⁴ Clinically, the manifestations of CO intoxication are protean. The brain and heart are the most susceptible organs because of their high oxygen requirements. Symptoms at low levels of poisoning include headache, dizziness, nausea, disturbances of concentration or judgment, dyspnea on exertion, paresthesia, fatigue, and chest

pain. Higher levels may produce convulsions, coma, cardiac arrhythmias, and cardiorespiratory arrest. Chronic exposure to low levels results in a variety of vague complaints, often leading to erroneous diagnoses.^{3,4} Late neuropsychiatric sequelae, such as memory impairment and personality changes, are well described.¹ While serum carboxyhemoglobin levels are helpful in diagnosing and treating CO poisoning, they do not always correlate with tissue levels.⁴ For instance, serum levels in chronic exposure may be low due to a lag between time of exposure and clinical manifestations.

Treatment of acute CO poisoning consists of removing the patient from the source of exposure and administering 100% oxygen until the carboxyhemoglobin level is <5%. Hyperbaric oxygen therapy may be used for significant exposures. Indications include a history of unconsciousness, the presence of neuropsychiatric abnormality or cardiac ischemia, and serum carboxyhemoglobin levels >25%. Hyperbaric oxygen should be used more frequently in treating children and pregnant women.⁵ Some evidence suggests that hyperbaric oxygen therapy reduces the late neuropsychiatric sequelae.¹ Both 100% oxygen and hyperbaric oxygen enhance the dissociation of CO and hemoglobin, and hasten the elimination of CO.³

CO poisoning is a common, life-threatening, and often misdiagnosed ailment. Clinicians need to have a high index of suspicion for its occurrence, particularly in the winter months when exposure is common.

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Injuries Are Not Accidents

LINDA SADLER

The health care community could serve the public well by eliminating the use of the term "accident" when referring to injury-producing events. The term "accident" can be defined as an unforeseen and unpreventable event or circumstance. In many instances modification of an individual's behavior, the environment, or some physical agent could prevent an injury-producing event. The public should be educated to recognize the direct relationship between behavior and injury-producing events and be encouraged to practice healthful lifestyles in order to reduce the risks of injury.

If one	drives fast,	There's likely to be	a crash
	has a very high tap water temperature,		a scald
	has a cluttered stairway,		a fall
	smokes in bed,		a fire
	lifts heavy objects incorrectly,		a back injury
	does not use a safety belt,		more severe injury or death during a crash

There are two types of injuries: unintentional (unplanned) and intentional (deliberate—assaults, suicides and homicides). As described above, crashes, scalds, falls, fires, and back injuries are not "accidents" but potentially preventable occurrences.

In Tennessee during the 1980s, injuries were responsible for more then 3,000 deaths each year. About 30% of these injury-associated deaths were intentional. Intentional injuries can also be prevented. Again, through modification of an individual's behavior, environment, or physical agent, intentional injury risks can be reduced. Actions individuals can take to reduce risk of intentional injury include:

- Limit access to weapons,
- Install security lighting and alarm system in the home,
- Lock doors in the car and home,
 - From the Tennessee Department of Health and Environment, Nashville.

- Limit night travel alone—particularly in areas with poor lighting,
- Practice stress management, and
- Learn to resolve conflicts nonviolently.

Each year approximately 140,000 Americans die from injuries and 70 million receive nonfatal injuries. More years of potential worklife are lost to injuries than from heart disease and cancer combined. Injury is particularly devastating to the young, being the leading cause of death among children and young adults. In fact, injuries result in more deaths for persons ages 1 through 34 than all diseases combined.

See editorial comment in this issue.

Injury is the most costly of all major health problems. It has been estimated to result in annual societal costs between \$75 billion and \$100 billion. Injuries generate a tremendous impact on our health care system. One out of every eight hospital beds is occupied by injured patients.

According to the Committee on Trauma Research in the National Research Council's Commission on Life Sciences, the leading cause of physician contacts is injury. Because of this prevalence and access to the patient, the physician can play an important role in addressing the injury problem. Listed below are suggested actions that physicians can implement to reduce the incidence of injuries in their patients:

- When treating an injury, investigate the actions that resulted in the injury and counsel the patient on behavior modifications to prevent recurrence.
- Include lifestyle-related questions on patient information forms and counsel patients in areas of deficiency.
- Distribute injury prevention materials (including brochures, cabinet latches, shock stops) to patients and their families.
- Display safety information sheets and posters in the office.

Physician involvement in reducing the impact of injury in America is essential. Through increased patient awareness and direct intervention, the impact of this major health problem can be reduced.

Expect the Best: Prepare for the Worst

J. KELLEY AVERY, M.D.

Case Report

A 20-year-old female college student reported to the emergency room with a history of pain in the left CV angle for 36 hours; she denied dysuria or hematuria. She was afebrile and normotensive, and a complete physical examination revealed no positive findings except for right CV angle tenderness to light percussion. There was no history of allergy.

Urinalysis revealed 10 to 20 WBCs, RBCs too numerous to count, with bacteria. No culture was done. A KUB film showed some calcification overlying the left kidney which did

not have the appearance of calculi.

The patient required narcotics to relieve her pain. She was given some analgesics and advised to see her private physician or the campus doctor in the morning. She was advised to return to the ER if her pain returned.

Five days after the above visit, the patient again came to the ER where the attending physician, a first-year surgical resident, obtained a history of pain in the left flank, and left lower quadrant abdominal pain. There were no other symptoms, and the patient was having a normal menstrual period. The physical examination, including a pelvic examination, was entirely within normal limits. An IVP was ordered.

The physician explained the procedure, including the possibility of a reaction to the contrast medium. The chart contains the note, "allergic reactions explained, patient understands."

The following are "post-event notes":

In X-Ray-

- 12:40—CM (contrast media) IV—Reacted—Radiologist saw patient—Resident paged—Resident arrived—Couldn't make diagnosis—Called ER MD—Radiologist left room after Resident arrived—ER MD directed patient be moved back to ER—Grand Mal seizure 1-2 minutes after CM injection. Patient immediately resuscitated.
- 1:07—IV med—steroids—other IV meds given.
- 1:58—Oral intubation—Pressors (Dopamine).
- 2:10—BP 80/0 (palpation).
- 3:30—Awake—Complaining of abd pain—Nodding appropriately to questions.

In Critical Care Unit-

3:30—Progress Note (M 4 student)—ER—1-5 min into CM IV—GM Seizure lasting 3 min—Skin became mottled—Petechiae over lower extremities—Began to lose consciousness—Pink froth noted orally—Anesthesia succeeded in intubating the patient after several attempts—Larynx could not be visualized secondary to fluid—Initial ABG—pH 6.88—CO₂ 58—O₂ 55.3—Transferred to ICU BP 90/50—On ventilator—

DIC leading to death about 10 hours after receiving contrast medium.

Dr. Avery is chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood, and associate director of Medical Affairs, St. Thomas Hospital, Nashville.

Autopsy—Diagnosis: (1) Left ureterolithiasis; (2) Venous angioma—right parietal lobe of brain.

The Autopsy Report included a very scholarly report on contrast media reactions, pointing out: (1) 20% to 30% are anaphylactoid in type; (2) Fatal in 1/11,000 cases; (3) Anaphylactoid reactions=IgE mediated sensitivity (urticaria, angioedema, pruritus, bronchospasm, and shock); (4) Most seizures are during the injection of the contrast media or within 10 min; (5) Idiosyncratic reactions are not dose-related; (6) A disproportionate number of reactions occur in the 3rd and 4th decades; (7) Decrease in peripheral vascular resistance—Hypotension—Tachycardia—Dysrhythmias; (8) Respiratory distress is the initial symptom in about 20% of the cases.

This case ended with a very large settlement involving all parties. Contributions to the settlement were made by the radiologist, the ER physician, the resident, and the hospital.

Loss Prevention Comments

Many times in the development of a lawsuit against a physician it becomes apparent that even if all the grievous acts cited in the complaint were true, those acts had little or no effect on the outcome. In other words, the acts cited in the complaint were not the cause of the outcome. Lawyers would refer to this as not related to causation. In all probability, in this case nothing could have been done to change the result, but settlement was necessary because of the obvious fact that the activity that followed the seizure demonstrated that the treatment team was unprepared, disorganized, and confused. It appeared that there was no logical response from the physicians involved. The radiologist was not prepared to assume the primary responsibility even in the short time that it took to get help. The baton was passed again from the resident to the ER physician. The area was not prepared to deal with this occurrence even though it is here in the Radiology Department that these reactions occur. The patient had to be moved to the ER. The anesthesiologist called to intubate the patient had trouble doing so.

There was at least a 20-minute lapse in time before steroids were given. The adequacy of fluid replacement must be questioned as well as the ventilatory treatment on the basis of the ABG that was initially reported.

Although the prognosis for a patient who has a true anaphylactic reaction to contrast media is dismal, some of the victims survive. Survival certainly depends to a great extent, however, on preparation, recognition, and response. Expect the best, but prepare for the worst. That is the way we must approach our patient care.



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Minutes of the Tennessee State Board of Medical Examiners Meeting

November 18-20, 1990

Members Present: William W. Cloud, M.D., President

Oscar M. McCallum, M.D., Secretary

Edgar Scott, M.D. Chris Blevins, M.D. Elizabeth Pierce, M.D.

Probation Report

Name: Dr. Rose Horne (Madison County)

Dr. Horne has reported as ordered to do annually. She has met all terms and probation continued. She is to report again in August 1991.

Reinstatement

Name: Dr. Alex Heffington (Hohenwald)

Dr. Heffington has met all requirements requested for the charge of substance abuse. He has been reinstated to full licensure.

Applicant Interviews

The following applicants met requirements and were awarded licenses in Tennessee: Drs. R.K. Agrowal (Johnson City, Tenn.); Albert P. Dickson (Louisville, Ky.); Gracy L. Dickinson (Newland, N.D.); Ben E. Einstein (Portland, Ore.); David McGrath (Nashville, Tenn.); Usman A. Siddiquir (Mobile, Ala.); Mohamed Zialeddin (Kearneysville, W.V.).

The following applicants did not meet requirements and were denied licensure in Tennessee: **Drs. Steven Garst** (Nashville, Tenn.); **Cholamreza Safariana** (Holland, Minn.).

DEA Reinstatement

Name: Dr. Dewey Hood (Decherd)

Charge: Overprescribing.

Action: All limitations were met; Dr. Hood's Class

III and IV narcotic privileges were restored.

Licensure Reinstatement

Name: Dr. Gary Bryant (Memphis)

Charge: Impaired physician.

Action: All conditions have been met; Dr. Bryant's

license was reinstated.

Agreed Orders

Name: Dr. Kenneth Wiley (Lebanon)

Probation restrictions were all met. Board vote—reinstate.

Name: Dr. Ricardo Sumbat (Sneedville)

Charge: Overprescribing.

Action: Probation one year; log of all (narcotic) drug prescriptions; 50 hours postgraduate education; report to Board of Medical Examiners in one year; TMA Impaired Physician Drug Course; drug audit before reappearance.

Summary Suspension

Name: Dr. Thomas R. Cox (Athens and Greeneville)

Charge: Overprescribing.

Action: Summary Suspension of license.

AMPHETAMINE RULES

The following are Rules regarding the use of amphetamines which have been approved by the Board and will be effective Nov. 12, 1990.

0880-2-.10 Amphetamines, Amphetamine-Like Substances, and Central Nervous System Stimulants

- (1) It shall be a violation of TCA 63-6-214 (a)(2) and (12) to prescribe, order, administer, sell, or otherwise distribute any amphetamine drug except:
 - (a) For treatment of the following:

- 1. Attention deficit disorder:
- 2. Drug-induced brain dysfunction;
- 3. Narcolepsy;
- 4. Dementia or organic brain syndrome with severe psychomotor retardation.
- (b) When the licensee has applied for and received from the Board of Medical Examiners a written approval for the clinical investigation of such drugs under a protocol satisfactory to the Board. Any such approval by the Board of Medical Ex-

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- aminers will be filed with the Board of Pharmacy and disseminated by the Board of Pharmacy to any pharmacy which would fill prescriptions written during the research.
- (c) The list of amphetamine drugs governed by this Rule includes the following controlled substances:
 - 1. Amphetamine, its salts, optical isomers and salts of its optical isomers (examples are Biphetamine, Dexadrine, Benzedrine, and others);
 - 2. Methamphetamine, its salts, isomers, and salts of isomers (an example is Desoxyn).
- (d) Any material, mixture, compound or preparation containing any quantity of the substances listed above is also governed by this Rule.
- (2) It shall be a violation of TCA 63-6-214 (a)(2) and (12) to prescribe, order, administer, sell, or otherwise distribute any amphetamine-like substance listed below, except:
 - (a) When the licensee has applied for and received from the Board of Medical Examiners a written approval for the clinical investigation of such drugs under a protocol satisfactory to the Board. Any such approval by the Board of Medical Examiners will be filed with the Board of Pharmacy and disseminated by the Board of Pharmacy to any pharmacy which would fill prescriptions written during the research.
 - (b) The list of amphetamine-like substances governed by this Rule are the following controlled substances:
 - 1. Phenmetrazine and its salts (an example is Preludin);
 - 2. Benzphetamine (an example is Didrex);
 - 3. Chlorphentermine (an example is Pre-Sate);
 - 4. Phendimetrazine (examples are Plegine, Bontril, Melfiat, Prelu-2, Adipost, Wehles, and others);
 - 5. Diethylpropion (examples are Tenuate and Tepanil);

- Mazindol (examples are Mazandor and Sanorex);
- 7. Phentermine (examples are Ionamin, Fastin, Adipex, and others);
- 8. Fenfluramine HS (an example is Pondimin).
- (c) Any material, mixture, compound, or preparation containing any quantity of the substances listed above is also governed by this Rule.
- (3) It shall be a violation of TCA 63-6-214 (a)(2) and (12) to prescribe, order, administer, sell, or otherwise distribute any central nervous system stimulant listed below except:
 - (a) For treatment of any of the following:
 - 1. Attention deficit disorder (also known as hyperkinetic child syndrome, minimal brain dysfunction in children and others);
 - 2. Drug-induced brain dysfunction;
 - 3. Narcolepsy;
 - 4. Dementia or organic brain syndrome with severe psychomotor retardation.
 - (b) When the licensee has applied for and received from the Board of Medical Examiners a written approval for the clinical investigation of such drugs under a protocol satisfactory to the Board. Any such approval by the Board of Medical Examiners will be filed with the Board of Pharmacy and disseminated by the Board of Pharmacy to any pharmacy which would fill prescriptions written during the research.
 - (c) The list of central nervous system stimulants governed by this Rule are the following controlled substances:
 - 1. Methyphenidate (an example is Ritalin);
 - Pemoline (including organometallic complexes and chelates thereof) (an example is Cylert).
 - (d) Any material, mixture, compound, or preparation containing any quantity of the substances listed above is also governed by this Rule.



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Gertrude's Annual Checkup

BOB VEGORS, M.D.

Last month Gertrude Beezlefetzer came in for her yearly checkup. Gertrude looks like her name sounds. She lives in an older house, which is about all that her husband left to her when he died unexpectedly ten years ago of a heart attack. They had moved from northern Pennsylvania to Tennessee the year before for some warmer quieter years together. Gertrude's husband didn't plan on their being this quiet. Last year Gertrude finally became eligible for Medicare, and was delighted until she read what wasn't covered. Knowing her financial situation, I have accepted assignment on her for the last several years.

Mrs. Beezlefetzer is the epitome of the LOL in NAD (little old lady in no acute distress). She has always taken good care of herself, kept her appointments, and tried to keep up with American Cancer Society screening recommendations. She eats oatmeal for breakfast, does aerobics most mornings, and still is suspicious of pork barbecue because her husband ate it at least twice a week for several months before his death. This year it was time for her Pap smear, and I was pleased to inform her that Medicare was now willing to pay for screening Pap smears. "You're lying!" "No." "But it's so out of character for them!" Gertrude has always been a little blunt, but honest. "Next thing you'll be telling me that they'll pay for mammograms* and proctoscopics!" "Mrs. Beezlefetzer, there is always hope."

As Gertrude was leaving after the exam she turned and said, "You know, doctor, I'm going home and write a letter to Dr. Sullivan at Health and Human Services, and thank him for Medicare paying for my Pap smear." I smiled, surprised that she was so well-informed of who's who in government. I smiled again when in the newspaper I read Dr. Louis Sullivan's statement of September 6, "We can no longer ignore the fact that prevention is the single most important factor in maintaining good health." I wondered if there was an army of Gertrudes out there writing letters, or whether the old "ounce of prevention" theory had finally hit home. Mrs. Beezlefetzer, there is always hope. Dr. Sullivan, fight the good fight, run the race, keep the faith. Gertrude and I are counting on you. . . .

Reproduced with permission from the Tennessee Society of Internal Medicine Newsletter. Dr. Vegors, the TSIM Newsletter editor, is with the Jackson Clinic Professional Association, 616 W. Forest Ave., Jackson, TN 38301. According to Dr. Vegors, Gertrude is his invention.

Close Out Sale!

History of the Tennessee Medical Association 1930-1980

èa.

Written By R.H. Kampmeier, M.D.



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^{*}Mammograms are now covered by Medicare.

Physician's Recognition Award

ARTHUR M. OSTEEN, Ph.D.

During the month of April, as in past years all physicians in the state of Tennessee who do not have a current and valid PRA certificate will receive an application by mail. The application is provided as a service to both members and nonmembers of the AMA who might like to apply for the award.

The PRA was established by the AMA in 1968, as a means of encouraging continuing medical education (CME) and as a way of recognizing physicians who participate in CME. Over the years there has been considerable debate as to how those objectives can best be achieved, and there have been changes made from time to time in award requirements. For instance the number of categories of reportable education was reduced from five to two in 1986. More recently, certificates were made available for one, two, or three years of CME activity.

This year the Continuing Medical Education Advisory Committee completed a review of the requirements for the PRA and recommended changes in those requirements; it proposed changes that were adopted by the AMA House of Delegates at its Interim Meeting in December. The changes grew out of the Advisory Committee's conviction of the primary place of self-directed educational activities in CME. They are directed at giving greater recognition of these activities in the PRA requirements.

The Advisory Committee recognizes that many physician-initiated CME activities cannot be documented. For that reason, AMA PRA Category 1 activities will continue to be mandatory also.

It has been apparent to the Advisory Committee for some time that there has been a widespread belief that Category 1 education is first class and that Category 2 is second class. The Advisory Committee is convinced, however, that many physician-initiated Category 2 activities are of first-rate quality and that physicians should be encouraged to participate in them. The PRA

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program has always permitted Category 2 activities to be reported, but many applications in the past have reported only Category 1. It is hoped that in the future, greater attention and greater respect will be accorded to Category 2 educational activities. (Report D of the Council on Medical Education follows this article.)

An effort is being made also to expand reciprocity activities. The PRA program has always accepted transcripts of CME activity for review in lieu of a completed PRA application form. And the program has already developed fairly extensive arrangements for reciprocity, allowing certificates from certain other organizations to be accepted in satisfaction of the PRA requirements. The program is beginning an experimental project under which transcripts from hospital CME offices are accepted as proof of an acceptable program of CME. It is hoped that this activity will make applying for the award easier for physicians and will encourage wider participation.

Following are the organizations with which there are reciprocal arrangements:

- American Academy of Dermatology (AAD)
- American Academy of Family Physicians (AAFP)
- American College of Obstetricians and Gynecologists (ACOG)
- American College of Preventive Medicine (ACPM)
- American Psychiatric Association (APA)
- American Society of Clinical Pathologists/College of American Pathologists (ASCP/CAP)
- American Society of Plastic and Reconstructive Surgeons (ASPRS)
- American Urological Association, Inc. (AUA)
- California Medical Association (CMA)
- Medical Society of New Jersey (MSNJ)
- Medical Society of Virginia (MSV)
- National Medical Association (NMA)
- Pennsylvania Medical Society (PMS)

PRA application forms and PRA information booklets are available on request from the following address: PRA Program, American Medical Association, 515 N. State St., Chicago, IL 60610.

Revisions to the Physician's Recognition Award

The Physician's Recognition Award (PRA) was established by the House of Delegates in December 1968. Since 1968 more than 500,000 physicians have earned a PRA certificate. At the present time about 22,500 certificates are provided annually. The purposes of the award are to encourage participation in continuing medical education (CME) and to recognize such participation. The requirements for the PRA were changed by House action in 1985; at that time the categories of education required for the award were reduced from six to two. In 1988 it was decided that certificates could be awarded for one, two, or three years of activity rather than only for three years, which had been the case when the award was established.

The six state medical societies that have continuing education requirements for membership accept the PRA in satisfaction of those requirements, and 11 of the 24 licensing jurisdictions with CME requirements for reregistration accept the PRA in satisfaction of those requirements.

To a considerable extent, PRA requirements set the standards for CME. Most organizations that provide certificates recognizing participation in CME require 50 hours of CME each year, and most distinguish between education provided by organizations accredited for CME and education obtained in other ways, and between education which can be verified in some fashion and education which cannot.

Responsibility for oversight of the PRA lies with the Council on Medical Education and its Continuing Medical Education Advisory Committee. With assistance from the Advisory Committee, the Council recently completed a review of the PRA and recommends that changes be made in the requirements for the PRA certificate.

Many of the requirements for the certificate will remain the same. Certificates will be provided for one, two, or three years of activity as at present. Fifty hours of CME activity per year will be required for the award, though these hours can be averaged for the two- and three-year certificates. The program will continue to have AMA PRA Category 1 and AMA PRA Category 2 credits. Reciprocity arrangements in effect with other programs of CME will remain in place. The definition of CME will remain unchanged as will the standard for

This is AMA Council on Medical Education Report D, as it was amended by the House of Delegates at its Interim Meeting in Orlando, December 1990.

AMA PRA Category 1 education. AMA PRA Category 1 education will, as at present, be designated only by organizations accredited for CME by the Accreditation Council for Continuing Medical Education or by one of the state medical societies.

A summary of the proposed PRA requirements is contained in the Appendix. The major change proposed is that both AMA PRA Category 1 education and AMA PRA Category 2 education be required for the award. At present all of the requirements for the PRA can be satisfied with AMA PRA Category 1 education.

Proposed Changes

1. AMA PRA Category 2 Education. It is proposed that a minimum of 20 hours of AMA PRA Category 2 education per year be required for the award. A minimum of 20 hours of AMA PRA Category 1 education will continue to be required as at present. The remaining 10 credit hours of education can be in either AMA PRA Category 1 or AMA PRA Category 2. The object of this proposed change is to place needed emphasis on self-directed education. Research has indicated that selfdirected activities are important and effective for the continuing learning of physicians. This change will recognize the importance of these activities. It will also support the importance of many excellent institutional activities which are not designated AMA PRA Category 1. It is anticipated that this change in requirements will end the widespread feeling that AMA PRA Category 1 education is first class and AMA PRA Category 2 second class. It is the strongly held belief of the Council on Medical Education that both AMA PRA Category 1 and AMA PRA Category 2 education are important.

The Council also proposes that organizations that have been accredited for CME by the ACCME be allowed to designate activities as AMA PRA Category 2. In the past it has been permissible only to designate programs as AMA PRA Category 1.

In the future there will be two kinds of AMA PRA Category 2 education: (1) education designated AMA PRA Category 2 by an organization accredited for CME by the ACCME or by one of the state medical societies; (2) self-directed physician education, such as use of instructional materials, medical writing, and teaching; and attendance at lectures that have not been designated AMA PRA Category 1.

Physicians can report both kinds of AMA PRA

Category 2 education for credit toward the Physician's Recognition Award.

- **2.** Recertification. Recertification by one of the AMA-approved specialty boards will be accepted as satisfying the requirements for a three-year PRA certificate. The object of this requirement is to recognize the educational effort involved in achieving recertification.
- 3. International Continuing Medical Education. International CME activities approved by the AMA (e.g., World Congresses endorsed by a specialty society represented in the House of Delegates) can be reported for AMA PRA Category 1 credit. Approval for the international activity must be completed prior to the occurrence of the activity and the AMA designation statement must be provided in the conference brochure.
- **4. Teaching**. Teaching in undergraduate, graduate, and continuing health professions education will be accepted for AMA PRA Category 2 education. This includes teaching of medical students, physicians, and other health professionals. In the past teaching by full-time faculty was not accepted for PRA credit.

Additional Comments

A number of educational activities at present acceptable for the award remain unchanged. A year of graduate medical education can be reported for 50 credit hours as at present. Each year of full-time study

in medically related graduate fields can be reported for 50 credit hours. Medical writing and presentation of papers continue to be reportable, as do personal learning activities such as consultation with peers, the use of electronic data bases, self-assessment activities, and quality care review. Activities which do not fit any of the educational categories described above can be reported as "Other Meritorious Learning Activities." These applications will be reviewed by the PRA Supervisory Committee.

Recommendation

The Council on Medical Education recommends that the proposed changes in the Physician's Recognition Award, as summarized below, be adopted.

- 1. To require 20 hours of AMA PRA Category 2 education for each application year;
- To accept recertification by an AMA-recognized specialty board in satisfaction of requirements for a three-year PRA certificate;
- 3. To allow credit for international conferences when these have been approved by the AMA prior to the event; and
- 4. To allow credit for teaching to be reported for AMA PRA Category 2 credit toward the award.

The amended report was adopted by the House of Delegates at the 1990 Interim Meeting.

APPENDIX

Summary of Proposed Requirements for AMA/PRA Certification

I. The same number of AMA PRA Category 1 hours and AMA PRA Category 2 hours will be required for certification

Required Credit Hours

- 20 hours of AMA PRA Category 1 and 20 hours of AMA PRA Category 2 for a 1-year certificate
- 40 hours of AMA PRA Category 1 and 40 hours of AMA PRA Category 2 for a 2-year certificate
- 60 hours of AMA PRA Category 1 and 60 hours of AMA PRA Category 2 for a 3-year certificate.
- II. The remaining hours needed to achieve 50 hours for one year, 100 hours for two years, and 150 hours for three years can be either AMA PRA Category 1 or AMA PRA Category 2.
- III. Activities by Category of Credit.
 - A. AMA PRA Category 1 (documentable and sponsor verifiable education)
 - Activities designated AMA PRA Category 1, including lectures, seminars, and personal learning activities;
 - 2. International CME activities approved by the AMA.

- B. AMA PRA Category 2 (education verified by physician-participant)
 - Personal learning activities not designated AMA PRA Category 1, including use of electronic data bases, self-assessment programs, and quality care review;
 - Teaching of undergraduate, graduate, and continuing education, including education for medical and other health professionals;
 - 3. Medical writing and presentation of papers and exhibits;
 - Courses designated AMA PRA Category 2 by accredited sponsors of CME;
 - Lectures and seminars not designated AMA PRA Category 1.
- IV. Reciprocal Pathways for 3-year certificates
 - Acceptance of certificate from organizations with which reciprocal arrangements have been established;
 - 2. Three years of accredited residency training;
 - Recertification by a specialty board recognized by the AMA.



HAMEL B. EASON

Was Gonna

For years I have called Diana "was gonna" because she and I so often use that phrase as an excuse for our failures of omission. When you write a series of President's Page articles, the ideas come and go. I would like to sort of go over lightly a few that went.

Title: *Quality.* I wanted to review the Institute of Medicine study "Medicare, A Strategy for Quality Assurance." The study recommended replacing the PRO with an entity that places emphasis on quality as opposed to cost concerns and would establish a program of continual improvement, rather than punitive sanctions.

Title: Chief Demagogue in Babylon on the Potomac. Fortney "Pete" Stark wants a test to certify physicians as competent to care for Medicare patients. He has got lots of other ideas. Let's can him like we did Tennessee Senator Lashlee.

Title: *Medical Practice in Massachusetts.* On Oct. 14, 1987, the governing counsel of the Massachusetts Medical Society passed a resolution stating that Massachusetts was "an undesirable location in which to practice." We need to quarantine that kind of environment to Massachusetts and keep it out of Tennessee.

Title: Declining Public Trust. Can our profession stand the test of personal integrity? Can I refer to my own CAT scanner? Can I deal with up-coding? Could

the term ethical physician become an oxymoron like honest politician? Can we tell the truth? Dr. Joseph L. Boyle in an essay modernized George Washington's answer about the cherry tree with "Father, I may have been guilty of bad judgment, but I really didn't do anything wrong."

Title: *Indigent Care.* Is indigent care so bad now? Imagine old Blockley, the Philadelphia alms house when Osler worked there in the late 1880s. Three thousand inmates suffered the Blockley smell compounded by dirty patients, dirtier nurses recruited from the paupers, badly cooked food, and neglected garbage. Perhaps we should work on our indigent care problem realizing that we have accomplished much in that short 100 years.

Title: AIDS. It would be great to get rid of the social baggage attached to AIDS. We need to call it HIV infection. We need to take care of the sick. We need to test freely without fear of sanctions.

Title: Do We Need the American College of Therapeutic "Cloggology"? Last year at AMA we had two hand surgery organizations battling to get representation in the AMA House of Delegates. Now we have Dr. David Fleischer, a gastroenterologist at Georgetown University, talking about "unclogging the obstructed biologic cylinder." He is seeking with tongue only halfway in cheek to establish a "new breed" of subspecialists, the scoopers and the catheter pushers. It makes a lot of sense when you consider the "cross fertilization" that might evolve.

Title: *Tax Cigarettes, Not Income.* I was intrigued by a recent essay by Michael Gartner. He reviewed the old tax story of Leofric, Lord of Coventry. His wife, Godiva, begged him to reduce taxes. He struck a deal; if she would ride naked through Coventry, he would cut taxes. The people of Coventry, in appreciation, didn't look, except one named Tom. The Gartner essay was entitled "Close My Eyes! No New Taxes!" All of this took place in the year 1040. As you fill in your IRS Form 1040, remember how much you do for Uncle Sam. You pay taxes and you buy his treasure notes to float his debts. You are a hero.

I hope your "was gonna" list is small, but as a people called to serve, we physicians often defer things, both great and small.

Hamel B. Eason M.D.

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MARCH, 1991

editorials

Accidents Will Happen

"When I use a word," Humpty Dumpty said, in rather a scornful tone, "it means just what I choose it to mean—neither more nor less."

—Lewis Carroll

Through the Looking Glass

That's a generally accepted tactic these days, more's the pity. More respect for whimsy than precision. It used to be, I always thought, that words meant what the dictionary said they meant. I have found, though, that triflin' with the language is commonplace, and is in fact probably as old as Adam. He can be excused, I guess, because he had no frame of reference. Ever since Dr. Samuel Johnson first codified the language, though, we have had one. In the last three or four decades particularly, the mother tongue has really taken a beating, due primarily to the nearly continuous invasion of our living rooms by the ubiquitous ignoramuses on the tube. In fairness, I guess I will have to say their lack of precision is not deliberate. It is just that they are largely untutored. What's worse, even if they have been tutored, by this time their tutors are often themselves untutored, and ignorance is compounded, and proper communication confounded. The fault lies not in the illiterate commentators, but in the producers who hire them; they are apparently chosen not because they know anything, but because they have glib tongues and tony hair-dos, knowledge be damned. Keep it up and we are headed for another Babel.

Though I do it with some difficulty, and even more chagrin, I can cope with those things by ignoring them as more or less minor derelictions. When such violence is perpetrated deliberately, though, rage sets in, and purple dots and wiggly unmentionables appear in my field of vision, and I am pushed to the bounds of apoplexy. It is even worse when such travesty appears in my own journal, and I am restrained by my self-imposed rules from doing anything about it.

accident $\setminus n$ -s 1a: An event or condition occurring by chance or arising from unknown or remote causes. 2a: A usually sudden event or change occurring without intent or volition through carelessness, unawareness, ignorance, or a combination of causes, and producing an unfortunate result.

I refer you to our article from the Tennessee Department of Health and Environment for this month, entitled "Injuries Are Not Accidents." I accord them more respect than they do the dictionary, because except for ensuring proper grammar and usage, I usually don't tamper with it. I do feel constrained, though, to comment when there is such a gross and deliberate violation as appears there this time, even though I let it stand. In fairness to the writer of that piece, though, she simply parrots the position taken by the trauma doctors, who are the ones doing violence to the dictionary. I continue to have trouble with them along these lines, and I don't intend to let it rest.

What they have done is redefine the word *accident* according to their own wishes. How they have

defined it is not wrong; it is only incomplete. They object to the use of the word accident with reference to injury because, they say, most injuries can be prevented, and are therefore not accidents. They are half right.

Most injuries can indeed be prevented, and the efforts of the TDHE and the trauma doctors and anyone else aiming their darts in that direction are most commendable, and to be applauded. They are incorrect, though, in labeling them by definition not accidents. According to the dictionary, they are, or at least can be, by definition still accidents, even though preventable: sudden events or change occurring without intent or volition through carelessness, unawareness, ignorance, or a combination of causes, and producing an unfortunate result.

The title to their piece, then, is misleading. It is certainly true that injuries are not necessarily accidents; some are deliberate. On the other hand, many injuries, even most, *are* accidents; most motor vehicular injuries are by definition accidental, in that they are not deliberate; those are the only two choices one has.

Let's do all we can to prevent injuries, whether or not they are accidents. But let's keep it honest.

J.B.T.

Superbowl 665.999

As the saying goes—or better went, I think during 'Nam—suppose they gave a Superbowl (or was it a war? I forget) and nobody came? Fat chance. There I sat, like a dyed-in-the-wool couch potato, eyes glued to CNN, watching a laser-guided bomb go down the airshaft of a bunker, a la Luke Skywalker, and blow debris out the door, along with the door. General Chuck Horner, commander of the air war, had all the earmarks of the cat that just swallowed the canary—or the superbowl coach after his pet play had racked up long yardage. I had millions of companions in potatohood on the couch, among them diplomats worldwide and the military in Saudi Arabia, who also were getting their war news from CNN.

Actually, it's weird; it even seems slightly immoral. It sort of smacks of the Roman crowds peering down on the gladiatorial combatants and screaming, "Off with his head," or some other equally appropriate instructions to their favorite swordsman. At the same time, though of course I have never seen a Roman gladiatorial contest, except in the movies, I have found football crowds at least as partisan, and I can't imagine that the Roman crowds

could possibly have been much if any more bloodthirsty. It is mostly a matter of possibilities, and maybe—just maybe—of a thin veneer of civilization.

I may as well confess right here and now that getting into the proper mood for composition any time is fraught with all sorts of roadblocks, such as ennui, short attention span, and just plain laziness. I find that compounded, to begin with, by just the very notion of war, and still further on this second day of it by all the accouterments of the electronic age that keep intruding on my consciousness when it is functional, and on my subconscious when it isn't. I just might, therefore, knock it off with less than my usual verbosity. I can't do that though, without first expressing my admiration for the tenacity, though not necessarily the judgment, or even of some of the tactics, of the reporters and camera crews who amidst falling bombs showed us the tracer-filled night skies over Baghdad, for the aviators who were flying through all that ak-ak to drop those bombs, and for the superb equipment that allowed them to drop those 2,000 pounds of ordinance down airshafts.

At the same time, I have to express my utter disdain for the many in the press corps who ask such embarrassingly idiotic and not infrequently offensive questions. Many are questions that any intelligent person ought to know could not, in the interest of the security of our military effort, and even of our continued national existence, possibly be answered. Such questioning, they should be smart enough to discern, simply serves to make them look, instead of wise and perspicacious, only ridiculous. Among the most offensive are some of the reporters for National Public Radio, who should be our exemplars. The public has no need to know everything, and no right to know some things, and the media seem not to know the difference. If they do, they don't exhibit it, which is worse.

I have also to remind you of the necessity for dealing in generalities here, since anything specific I might say will be rendered of no consequence, if in fact it is not anyhow, by what is bound to transpire in the six weeks or so before you read it. I can't help thinking that the stage that's being set looks pretty good for Armageddon, the final battle, though according to prophecy five other angels have first to pour out the unpleasant contents of their vials upon the world. I guess, then, the time is not right. That's just in case you are interested. There's enough else around to keep things moving, and life goes on—or at least one hopes it does.

For some, of course, as in the gladiatorial games, but not in the Superbowl, it doesn't. Presently the United States alone has nearly a half-million of its finest young men and women in imminent danger of

being among those for whom it doesn't. Some already are among those, and others will be by the time you read this; one hopes they will be few, but there are no such guarantees. Nearly every one of those half-million has left behind several suffering loved ones, who need the support of every one of their countrymen; what's more, they deserve it.

For various reasons, not everyone in this country is enthusiastic about this war, and indeed it would be remarkable if they were; it would make this war unlike any other that had ever been waged. Protesting it is their constitutional right. Disrupting the lives of others or destroying their property in the process is not. The most contemptible of all creatures are those who harass the families of military personnel serving their country overseas; some have reported getting harassing telephone calls for no other reason than that their husbands were in Saudi Arabia, as if that in itself weren't tribulation enough. There must be a special place in hell for perpetrators of such atrocities. If there isn't, I'm going to see can't I arrange one. One has to wonder about the motives of such people for opposing the war; it could not be out of concern for people. They are as much war criminals as Saddam Hussein, Stalin, or Hitler.

I hope that by the time you read this piece it will be an anachronism, with the war over, Kuwait freed, the harassers of soldiers' wives safely in the fire, the Palestinian question solved, and stability restored to the Middle East. I'm not counting on it, understand, either collectively or individually, but one can always hope.

J.B.T.

Remembering a Nova

Twinkle, twinkle, little star, How I wonder what you are, Up above the world so high, Like a diamond in the sky.

Nursery Rhyme

Early of a morning not long ago, considerably before the sun had even thought about brightening the horizon, I turned out of our driveway to confront the thin crescent of a last-gasp moon; framed by the bare branches of the treetops that line our street, it hung there, holding water, in pallid, solitary splendor. Once upon a time not so many years ago that crescent would have been set off in dark velvet by a twinkling diadem, but no more. Now we have street lights, and because it is safer I should be grateful that

we do, and I am, usually. But not this morning. This morning as nostalgia swept over me I felt deprived. Even the morning star, which should have been lending its brilliance to the emerging horizon, was obscured by a line of clouds, and Diana was alone. That should have been enough.

It should have been enough, but it wasn't. The objects of nostalgia—usually some cherished souvenir or another out of the past-are made the more poignant by their very inaccessibility. That has stimulated man since time immemorial to make unto himself graven images, so to speak-not only to represent the unseen, as with the gods or demons his soul told him were real enough even though unseen, but also to preserve for all time something evanescent, something of infinite beauty that had flitted, perhaps ever so fleetingly, across his consciousness. Any such attempt is futile, of course. No depiction can ever do any more than evoke recollections of the event itself, and in fact may only intensify the longing for it. What with trees and city lights, the stars, except for the very brightest, and on the clearest nights, are pretty much obscured. That's just the way it is with stars in man's modern universe, and you have to learn that even if you wish upon one, your dream for it isn't going to come true.

For many reasons, the stars have always been paragons of beauty and mystery. The Psalmist wrote, "When I consider the Heavens, the works of Thy fingers, the moon and the stars which Thou hast ordained, what is man that Thou art mindful of him. . . ." The ancients had all sorts of notions about the origins of stars and constellations, as indicated in their myths and legends. Only diamonds were their peers; hence the simile in the nursery rhyme.

I don't know when the currency became debased, but now anything at all can be, and often is, called a stellar attraction, and a star is whomever some entrepreneur is promoting. Instead of being an absolute, such earthly things are stellar in the eyes of whatever beholder is willing to consider, or profess to consider, them so. There are, therefore, stars and there are *stars*. Which is which depends, I guess, on whom you ask.

A major part of both the attraction and the mystery of stars has been their ability to twinkle. Only relatively recently has this been found to be a function of the vagaries of the atmosphere. Seen from space, the stars are constant lights. Few of them, though, are of an order of magnitude to twinkle through the haze and the brilliance of the cities' night sky. Most of them are, to quote Pogo, "blunk out."

Back in the days when Camels were cigarettes—maybe they still are; I haven't paid any mind to such

things for years—a catchy ad, featuring a dromedary, opined that 9 out of 10 doctors preferred Camels, to which some wag retorted that it was not so; 9 out of 10 doctors who tried Camels preferred women. As to that, the playwright opined, in a Broadway musical of that name, that gentlemen prefer blondes. Maybe they do, but not necessarily; there are other considerations, sometimes only availability. One blonde almost all—maybe all—did prefer was the one who played the lead in a movie version of the musical. Some years before that, in the early days of her career and the latter days of my pathology residency, she played another lead role, that of the feature attraction on a famous calendar—or an infamous one, depending on one's orientation; the latter estimation was not one shared by very many of the male gender, however. When a copy of the photograph mysteriously appeared on a ceiling in the Vanderbilt pathology department, there was no rush to remove it; it stayed there, in fact, keeping us company, until the Scotch tape holding it failed, and it fell of its own weight. Dr. Goodpasture, happening to spy it there above him one day, chuckled, "Hmm. Marilyn Miller," in reference to a beauty of an earlier generation.

Once after covering a nudist convention a reporter opined in print that except for Marilyn Monroe, people ought to wear clothes. Sure enough, the calendar notoriety (in case you have gone through life either retarded or deprived, Marilyn was the star of both the calendar and Gentlemen Prefer Blondes) followed her throughout her too-brief career, and pegged her in some minds as a gorgeous edifice whose elevator didn't run to the top floor. That shallow evaluation was belied by her performance before the camera, one that is properly called stellar. Her personal, and even her professional, life was a mess, requiring that everyone associated with her overlook a great deal. Overlook it they did. Her last days, ending with an overdose of phenobarbital, have been shrouded in mystery. Twentieth Century Fox, the studio where she was working on a film entitled Something's Got To Give, a remake of My Favorite Wife, fired her for work failure (only to rehire her again after a few weeks, and shortly before she died). Not only was her work pattern deplorable, but she had, they said, lost her touch, and so they forthwith destroyed the negatives and all copies of the film. Or so they thought.

Some others should lose their touch the same way. In a film library in Czechoslovakia a forgotten copy of her uncompleted last film lay gathering dust until a short time ago, when it was exhumed and screened in a special television presentation for the world to see just how much of the touch remained. The

Marilyn who appeared was the same beautiful creature that inhabited her early films, and scenes with her two film children displayed her marvelous talent for both pathos and comedy, a legacy of her own abandoned, abused childhood. She didn't just twinkle; she glowed and sparkled. She gave every evidence of being at the height of her career. Then, like Mozart, Schubert, Chopin, and countless other sparkling gems, Marilyn departed this world too soon.

Or did she? Creativity is unpredictable, and Marilyn, despite the remarkable acting and wondrous physical form displayed in her brief comeback, was giving every evidence of coming unglued, even though her untimely death was likely unintentional. Might-have-beens can go either way; thanks to modern technology, though, we have a marvelous legacy.

I might be wrong, but I believe motion picture actors and actresses were the first earthbound beings to which the term "star" was applied. It was hyperbole coined by the early impresarios of Hollywood. Though those stars were looked upon with much adulation by the public, and lived glamorous lives that were the envy of nearly everybody, they were in fact chattel of the big studios, subject to the whims of avaricious producers and agents and a fickle public alike. They lived high to support the image manufactured by their agents, and more often than not died or passed their declining years penniless, objects of charity from the Screen Actors' Guild. The entire industry was even more of a facade than the streets of a Hollywood set. Nevertheless, they all struggled to reach that exalted status. There were various ways of beginning the process and maintaining the interest. Few of the stars called many of the shots.

Through the marvels of the electronic age, Marilyn has remained forever young and beautiful these nearly 30 years since her tragic death at the early age of 36 years. On June 13, 1962, the day before she died, she declined by telegram an invitation from Attorney General Robert Kennedy to join the Kennedy clan at a dinner honoring Peter Lawford, responding that "...I will be involved in a freedom ride protesting the loss of the minority rights belonging to the few remaining earthbound stars. After all, all we demanded was our right to twinkle." Nobody twinkled with more authority than Marilyn Monroe.

Save for the moon and a few planets, the brightest bodies in the night sky are exploding stars. They are the novas. They burn brilliantly for just a short while, and then they are gone.

J.B.T.



Wallace Lee Chambers, age 84. Died July 13, 1990. Graduate of University of Tennessee College of Medicine. Member of Bedford County Medical Society.

Alfred Nixon Costner, age 71. Died December 14, 1990. Graduate of Washington University School of Medicine. Member of Washington-Unicoi-Johnson County Medical Association.

Paul David Jones, age 91. Died January 5, 1991. Graduate of University of Tennessee College of Medicine. Member of Consolidated Medical Assembly of West Tennessee.

Robert Hunt Morris, age 86. Died December 27, 1990. Graduate of University of Tennessee College of Medicine. Member of Consolidated Medical Assembly of West Tennessee.

TMA Members Receive AMA Physician's Recognition Award

The following TMA members qualified for the AMA Physician's Recognition Award during December 1990. This list, supplied by the AMA, does not include members who reside in other states.

Physicians can receive the PRA certificate valid for one, two, or three years. For the one-year award, physicians report 50 hours of continuing medical education, including 20 hours of Category 1; for the two-year award, physicians report 100 hours of CME, including 40 hours of Category 1; for the three-year award, physicians report 150 hours of CME, 60 of which are Category 1.

Jerome H. Abramson, M.D., Chattanooga Irshad A. Ahmad, M.D., Johnson City George E. Allen, M.D., Chattanooga Frederick Aptowitz, M.D., McMinnville Robert Buchalter, M.D., Memphis Robert T. Doster, Jr., M.D., Nashville Melvin L. Elson, M.D., Nashville Richard E. Green, M.D., Woodbury Ronald K. Grossman, M.D., Memphis Thomas E. Hanes, M.D., Madison Patricio A. Ilabaca, M.D., Memphis Penn Q. Joe, M.D., Memphis Richard A. Krause, M.D., Chattanooga Kenneth M. Lloyd, M.D., Nashville Harvey S. Sanders, M.D., Nashville Charles S. Settle, M.D., Nashville Cynthia C. Youree, M.D., Brentwood

new member

The *Journal* takes this opportunity to welcome these new members to the Tennessee Medical Association.

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BRADLEY COUNTY MEDICAL SOCIETY *Ray Hargreaves, M.D.*, Cleveland

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Parasitic Diseases Reported in Memphis Hospitals in 1984 and 1989

STAN EISEN, Ph.D.

Introduction

Immunocompromised individuals tend to acquire infections caused by opportunistic parasites. The principal parasitic organisms that have been associated with such infections include *Pneumocystis carinii*, *Toxoplasma gondii*, *Cryptosporidium* spp., and *Strongyloides stercoralis*. Table 1 shows a list of symptoms associated with each of these parasitic organisms. ^{2,3}

Within the past ten years, the number of immunocompromised individuals has increased dramatically due to the spread of the HIV-1 virus, which causes acquired immunodeficiency syndrome (AIDS). Surveys distributed in 1984 and 1989 allow a comparison of the prevalence of major parasitic diseases during a time in which the incidence of AIDS has increased.

Materials and Methods

Surveys were sent to the directors of the medical laboratories affiliated with hospitals in the Memphis metropolitan area. Seven laboratories responded to surveys in both years and provided the data presented in this paper (Table 2). Responders were asked to give the number of cases for each species listed. The survey form consisted of three sections, correspond-

ing to protozoan, helminth, and arthropod infections. Sufficient space was left in each section to allow responders to include parasitic organisms that were not specifically listed on the survey form. Some of the responses indicated a range of values. In such cases the arithmetic mean was used for compiling the data.

TABLE 1
SYMPTOMS ASSOCIATED WITH PARASITIC INFECTIONS
FOUND IN IMMUNOCOMPROMISED PATIENTS*

Parasitic Species	Symptoms
Toxoplasma gondii	Fever, headache, muscle pain, anemia, spastic paralysis, blindness, myocarditis and permanent heart damage. Infection among pregnant women may cause stillbirth, spontaneous abortion, congenita defects, hydrocephalus, microcephaly, chorioretinitis, and psychomotor disturbances.
Pneumocystis carinii	Interstitial pneumonia, which can lead to fever, severe dyspnea, tachypnea, cyanosis, and sudden death.
Cryptosporidium spp.	Watery diarrhea, which can persist for months and be life-threatening.
Strongyloides stercoralis	Hyperinfection, which leads to persistent diarrhea. Worms can transport coliform bacteria throughout the body, resulting in a gram-negative encephalitis.

From the Biology Department, Christian Brothers University, Memphis. Reprint requests to Biology Department, Christian Brothers University, 650 East Parkway South, Memphis, TN 38104 (Dr. Eisen).

^{*}Summarized from Schmidt and Roberts,2 and Bogitsh and Cheng.3

PARASITIC DISEASES IN MEMPHIS/Eisen

Results

Protozoan infections were the most commonly reported parasitic group; in both surveys, *Trichomonas vaginalis* and *Giardia lamblia* were the two most frequently reported. Noteworthy changes included increases in cases of *P. carinii*, which increased from 0 to 137, and *Cryptosporidium* spp., which increased from 1 to 17 (Table 3). The incidence of both congenital and adult infections with

TABLE 2
LIST OF HOSPITAL-AFFILIATED MEDICAL LABORATORIES
THAT PROVIDED INFORMATION IN BOTH 1984 AND 1989

Hospital	Resource Person(s)
Saint Joseph	D. Brewster
Regional Medical	V. Baselski
Veterans Administration	A. Jukkala
Baptist Regional Laboratories	G.F. Walker, V. Baselski
Methodist	M. Haas
Saint Francis	N. Gish
LeBonheur Children's Medical Center	B. Peca, R. Joyner, D. Rill

TABLE 3
PARASITIC INFECTIONS REPORTED IN MEMPHIS HOSPITALS

	1984	1989
Protozoa		
Trichomonas vaginalis	1,224	1,658
Giardia lamblia	97	142
Pneumocystis carinii	0	137
Toxoplasma gondii		
Adult infections	69	6
Congenital	10	0
Cryptosporidium spp.	1	17
Entamoeba histolytica	5	0
Plasmodium spp.	1	6
Isospora belli	0	2
Helminths		
Enterobius vermicularis	40	13
Strongyloides stercoralis	5	2
Ascaris lumbricoides	7	6
Toxocara spp. (visceral larva migrans)	1	1
Hookworms	3	1
Trichinella spiralis	1	0
Trichuris trichiura	1	1
Diphyllobothrium latum	2	0
Clonorchis sinensis	2	1
Arthropods		
Phthirus pubis	7	11
Pediculus spp.	7	8
Ticks	12	9
Chiggers	1	0
Sarcoptes scabiei (scabies)	26	2

T. gondii decreased, from 10 to 0 and from 69 to 6, respectively.

The most commonly reported helminths and arthropods are those endogenous to the United States (Table 3). Regarding the two cases reported in 1984 of *Clonorchis sinensis*, endogenous to China and Southeast Asia, the infected individuals were members of the same family, which had emigrated from Vietnam to Memphis (personal communication).

Discussion

The focus of medical parasitology in the United States has changed due to the presence of opportunistic diseases associated with immunosuppression. Organisms that cause life-threatening infections among these patients include *P. carinii*, *T. gondii*, *Cryptosporidium* spp., and *S. stercoralis*.

Of these, *P. carinii* is probably the most virulent. Approximately two-thirds of AIDS patients enter a hospital with respiratory stress or pneumonitis caused by this organism, and up to 95% of them eventually contract this disease. The increase in *P. carinii* infection can be attributed to the increase in AIDS patients in the mid-South area. It is probable that the increased incidence of *Cryptosporidium* infection is also due to the increased numbers of AIDS patients. The decrease in the incidence of *T. gondii* and *S. stercoralis* cannot be accounted for with the data available.

This type of survey underestimates the incidence of arthropod infections, since most arthropod infections do not require either hospitalization or outpatient testing. For example, anecdotal records kept by the director of the Memphis/Shelby County Health Department indicate that the Department receives an average of two calls per day during the school year regarding cases of head lice (personal communication). Most cases are documented either by the child's teacher or the school nurse. Nonetheless, if it is assumed that the average class size is 30 children, then a possible 10,000 students are potentially exposed to head lice per year.

Acknowledgements

I thank the secretarial staff of the Department of Microbiology and Immunology of the University of Tennessee–Memphis and the medical laboratory directors mentioned in the text.

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Pulsed Dye Laser Therapy for Port-Wine Stains in Children

T. WAYNE DAY, M.D.; CHRIS C. PARDUE, M.D.; and CHARLES DINWIDDIE, CRNA

Introduction

The treatment of port-wine stains, especially for children, has dramatically changed. Until recently, the recommendation was that they wait until they were over 18, then have argon laser treatment.¹⁻³ Adult port-wine stains being darker, responded acceptably to argon laser treatments, but in children there has been up to 40% incidence of scarring.

Unfortunately, waiting allows these congenital malformations to expand as the child grows; they thicken, and cause hypertrophy of the underlying tissues (Fig. 1). They may become ectatic, bleed easily, and cause gross disfigurement. More importantly, detrimental psychological effects develop as the children see themselves "marked" for life.⁴

Research by Parish and Anderson⁵ at Massachusetts General Hospital and Tan and coworkers⁶ at Boston University Medical Center led to the release of a new laser in March 1988. The Candela pulsed dye laser uses rhodamine dye to produce an intense yellow light that corresponds to one of oxygenated hemoglobin's absorption peaks at 585 nm.

The previous treatment of choice for adult portwine stains, the argon laser, emits light at shorter wavelengths (488 and 514 nm), which are less penetrating and absorbed more by melanin, the main competing chromophore.

The energy delivered by the Candela laser is further selective by being pulsed at very short exposures of 450 microseconds, limiting the spread of heat to a short distance around the affected dermal blood vessels; it does not affect the tissues between the blood vessels, as has been shown to occur with the less selective argon laser.⁷

Selective photothermolysis with yellow light lasers has become the treatment of choice for port-

wine stains. We review our experience with 60 children with port-wine stains.

Methods

We retrospectively reviewed the cases of all children with port-wine stains seen or treated at Belle Meade Dermatology, Nashville, over an 18-month span ending Sept. 1, 1990.

Treatments

An initial test site of involved skin was chosen and exposed to 5.75/6.0/6.25 J/sq m with a Candela pulsed dye laser with a pulse duration of 450 microseconds and spot size 5 mm diameter.

The test site and any history of scabbing were evaluated at a visit in four to eight weeks. Treatment was then given at the power density of maximum clearing without scabbing. Subsequent treatment power densities were raised .25 to .50 J/sq m unless scabbing or maximum clearing had occurred after a previous treatment.

Anesthetic management was based primarily on the patient's age and lesional size and location. Options included no anesthesia, sedation with meperidine IM (1.1 to 1.8 mg/kg)/promethazine IM (1.1 mg/kg), or chloral hydrate orally (25 mg/kg), or general anesthesia.

Fig. 2 shows the anesthetic selection for patients who had two or more treatments. Patients receiving general anesthesia were evaluated preoperatively with an accurate medical history. Known medical conditions were identified and medical consultations were requested as necessary. Parents were informed of the risks and benefits of the general anesthesia procedure and potential outcomes, and were given preoperative instructions as to withholding oral intake, and premedication when needed.

Most children were accompanied to the treatment room by a parent, enabling the children to remain calm and relaxed during the anesthetic induction. All patients were continuously monitored in accordance with safe standards of care during anesthetic ad-

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Reprint requests to 4515 Harding Road, Suite 210, Nashville, TN 37205

ministration. Management of general anesthesia was individualized to the patient, with most children receiving a mask induction and maintenance with a volatile anesthetic agent, supplemented by intravenous analysics when applicable.



Figure 1. Port-wine stain showing hypertrophy.

Results

Sixty white children were evaluated, 2 months to 18 years old; 36 were girls and 24 were boys. Related syndromes were found in five (Sturge-Weber in two and Klippel-Trenaunay-Parks Weber in three).

Eighteen patients have had one or no treatments as of the study cutoff date, and were excluded from further analysis in this study.

Of the 42 who had two or more treatments, 11 (26%) required no anesthesia or sedation. One had chloral hydrate and two had meperidine/promethazine IM; 28 (67%) had general anesthesia. There were no anesthetic complications.

Anesthetic Management, ≥ 2 Treatments (42)				
General Anesthesia	28	2 - 18 Years (5 of 9 Teenagers)		
Sedation	3	2 - 18 Years (2 of 9 Teenagers)		
None	1/1	2 Mo 2 Years (2 of 9 Teenagers)		

Figure 2. Anesthetic management.





Figure 3. Port-wine stain before (left) and after (right) pulsed dye laser therapy.

Treatment was essentially complete ($\geq 75\%$) in 13 cases at the time of study cutoff. A range of 3 to 12 treatments were required, mean 7.1. No cases showed scarring or textural changes. In all cases there was transient purplish discoloration and edema that resolved in 7 to 14 days. A representative case is illustrated in Fig. 3.

There have been no anesthesia injuries and no unplanned hospital admissions for management after treatment.

Discussion

Refinements in laser technology have yielded reproducibly excellent clinical results in treating adults and children with port-wine stains. The risk of scarring has been essentially eliminated. Our goal is to provide treatment early in life, with minimal associated anxiety and discomfort.

Early treatment minimizes the psychological trauma of bearing a birthmark, and prevents the late effects of nodule formation, bleeding, and tissue hypertrophy. Fewer and shorter laser treatments are needed in early childhood as port-wine stains are smaller and thinner than adult port-wine stains.

The discomfort of pulsed dye laser impacts is

described by patients as a pinprick sensation or being struck with a rubber band. Many tolerate this sensation without anesthesia or sedation. When a large area is being treated, however, especially when there is eyelid or lip involvement, sedation and/or anesthesia may be required.

We also recognize a fearfulness of medical procedures is especially common in childhood. At the time of the preoperative evaluation and test site treatment, the child's anesthetic needs can be discerned. General anesthesia is often necessary for children over the age of 2 years.

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HELP FOR IMPAIRED PHYSICIANS	
Through its Committee on Impaired Physicians, TMA helps doctors who are suffering from alcoholism and drug addiction. The thrust of the program is rehabilitative, not punitive. The Committee is composed of physicians who have special expertise in these areas, some from personal experience. Effective treatment for these illnesses is achieved most easily when the disease is detected early; family, friends, and associates are urged to avoid misguided sympathy which enables the condition to deteriorate.	וסססססססס
HELP US TO HELP	
Call the TMA Impaired Physician Program (615) 386-3377; outside Nashville call collect. Telephone message service available around the clock.	

Pancreatic Carcinoid With Extensive Osteolytic Bone Disease

RONALD H. LANDS, M.D. and ANAND KARNAD, M.D.

Introduction

In the older literature, carcinoid tumors were considered benign tumors in spite of their histologic similarity to carcinomas of the bowel. Later reports indicated that these tumors were capable of metastasis to regional nodes, liver, lung, and bone. Bone metastases are an uncommon complication of this tumor, and when they do occur, they usually come from bronchial or small bowel primaries. In this case, a patient with a pancreatic carcinoid tumor had extensive osteolytic bone metastases.

Case Report

Thirteen months before admission a 44-year-old white man had pain in his right anterior chest, attributed to straining while pulling a boat onto a dock. Chest roentgenography revealed a fractured fifth rib on the right anteriorly, and he was treated symptomatically, but continued to have pain. There was no radiologic evidence of healing of the fracture, and he developed relentless pain in his back. The rib pain worsened, and he lost 30 lb over the 12 months before admission. He denied flushing, wheezing, or diarrhea. He had been previously healthy except for an admission three years earlier for nephrolithiasis; a CT scan of the abdomen at that time revealed a 2.5-cm cystic lesion at the head of the pancreas. He had smoked one to two packs of cigarettes daily for 30 years.

Physical examination revealed a chronically ill appearing man with temporal wasting and percussion tenderness over the right upper chest and lower lumbar vertebrae. There were no focal neurologic abnormalities, abnormal lymph nodes, or abdominal organomegaly.

Chest roentgenography revealed a large osteolytic lesion in the fifth rib on the right anteriorly (Figs. 1 and 2), and vertebral roentgenograms showed lesions involving thoracic and lumbar vertebrae. A radionuclide bone scan revealed extensive uptake in the ribs, the lower thoracic and upper lumbar vertebrae, and the pelvis. Roentgenograms of these areas confirmed the presence of large lesions involving the right iliac spine and left acetabulum, as well as extensive involvement of the vertebral bodies. Magnetic resonance imaging (MRI) showed encroachment on the spinal canal by T-9 and T-11 vertebral bodies. CT scans of the chest, abdomen, and pelvis revealed a large mass at the head of the pancreas, with deviation of the common bile duct, and a 1.5 x 1.5 cm mass was noted in the left lobe of the liver. No abnormal nodes were noted at any level.

From the Department of Medicine, Division of Hematology-Oncology, Veterans Affairs Medical Center, and the James H. Quillen College of Medicine, East Tennessee State University, Johnson City.

Reprint requests to Department of Medicine, James H. Quillen College of Medicine, PO Box 21160A, Johnson City, TN 37614 (Dr. Lands).

Serum and urine for immunoelectrophoresis did not reveal a paraprotein. Twenty-four-hour urine for 5-hydroxyindolacetic acid was 7 mg/24 hr (normal <10 mg/24 hr).

An open biopsy of a rib lesion revealed a picture compatible with a malignant carcinoid tumor. Special stains for synaptophysin were positive. Stains for CEA, mucin, prostatic acid phosphatase, and prostrate specific antigen were all negative.

He received radiation therapy to the impending cord compression, but declined systemic therapy. The indolent, yet relentless development of new bone lesions continues 17 months after the initial diagnosis of rib fractures, and 46 months after a lesion was first noted at the head of his pancreas.

Discussion

Carcinoid tumors are generally classified according to their embryologic origin. Foregut carcinoids



Figure 1. Chest x-ray demonstrating a large osteolytic lesion in the right fifth rib.

include bronchial, gastric, duodenal and pancreatic primaries, whereas hindgut carcinoids present primary tumors in the left colon and rectum; ileal and appendiceal carcinoids are derived from the midgut. The most commonly diagnosed carcinoids are appendiceal, ileal, and rectal²; pancreatic carcinoids are rarely diagnosed.²

The early diagnosis of a carcinoid tumor is usually restricted to that fraction of tumors found incidentally at appendectomy. The risk of metastasis increases with the size of the primary lesion, a tumor less than 1 cm rarely metastasizing. Tumors larger than 2 cm are more likely to metastasize, and require more extensive surgery.³



Figure 2. Close-up view of bone metastasis in the right fifth rib.

Skeletal metastases are most commonly associated with a carcinoma originating in the lung, breast, kidney, or prostate, or from an unknown site⁴; bone metastases are rarely attributed to carcinoid tumors. While carcinoid bone metastases are said to be characteristic of foregut derived primaries, bronchial carcinoids account for most of them.⁵ The axial skeleton is the usual site, and osteoblastic or mixed osteoblastic-osteolytic lesions are the rule.⁵ A peculiar ten15dency of carcinoid bone metastases is to be asymptomatic even when extensive.⁶ Pancreatic carcinoids, also of foregut origin, have only rarely been reported as having bone metastases.⁷

As illustrated in this case, carcinoid tumors may be indolent even in the face of extensive disease. The treatment of metastatic carcinoid tumors is largely symptomatic. Radiation was utilized in our patient in an attempt to provide pain relief and stabilize the vertebral disease. Chemotherapy is generally ineffective, although combinations including doxorubicin or streptozotocin have shown response rates of 20% to 30%. The use of interferon has been reported to yield an objective response rate of 15%, with disease stabilization in most patients at one year.⁸

Bone metastases from primary carcinoid tumors are uncommon, and bone lesions resulting from pancreatic primaries are rare. Carcinoid tumors should be considered in the differential diagnosis of the patient who presents with evidence of skeletal metastasis, especially if the course is one of slow progression.

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Bronchial Rupture

JOHN N. MEADORS, M.D.; GEORGE SCHUCHMANN, M.D.; and KIMBALL I. MAULL, M.D.

Introduction

Tracheobronchial disruption resulting from blunt trauma is rare. The treating physician is often presented with a multiply injured patient and must maintain a high index of suspicion if the diagnosis is not to be overlooked. Bronchoscopy is necessary to confirm the diagnosis. If tracheobronchial disruption is present, immediate surgery is required for good long-term results. What follows is an illustrative case report and review of the literature.

Case Report

A 16-year-old white girl was struck by a motor vehicle principally in the right chest. She was transferred by ground ambulance to a county hospital, where she had dyspnea, extensive subcutaneous emphysema of the right chest, a small .5×.5-cm sucking chest wound 6 cm cephalad to her nipple, and a stable normal blood pressure. Chest x-ray demonstrated a right pneumothorax that did not resolve despite a chest tube and occlusive dressing to her anterior chest wound. Her dyspnea worsened, and oral intubation was required. She was transferred to the University of Tennessee Medical Center in Knoxville via air ambulance, where on arrival her blood pressure was 136/76 mm Hg, pulse 134/min, and unassisted ventilatory rate >30/min. Chest x-ray confirmed fractures of the right clavicle and right third and fourth rib, a large right pneumothorax, and small left pneumothorax, for which a second right chest tube and a left chest tube were placed (Fig. 1). Compression fractures of the 11th and 12th thoracic vertebrae were identified. She was taken to the intensive care unit with a large air leak noted from her right chest tube. A large laceration to the right mainstem bronchus at its junction with the carina was visible on flexible bronchoscopy, for which exploratory thoracotomy was done, revealing complete transection of the right mainstem bronchus at its point of origin from the carina. The lesion was repaired using simple interrupted 4-0 polypropylene sutures, and she was extubated on the second postoperative day. After developing tachypnea and decreased oxyhemoglobin saturation, she was reintubated and bronchoscoped. The suture line was intact and the bronchus was patent. She was extubated a second time on the sixth postoperative day, and had an uncomplicated course thereafter. She was discharged to home on the 15th postoperative day.

Discussion

Three mechanisms of tracheobronchial disruption have been proposed. When a decrease in the antero-

posterior diameter of the thorax occurs, with widening of the transverse diameter, the lung remains in contact with the chest wall as a result of negative intrapleural pressure between the visceral and parietal pleura. Lateral motion pulls the two lungs apart, producing traction on the trachea at the carina. If this force exceeds the elasticity of the tracheobronchial tree, rupture occurs. The second theory holds that if the glottis is closed at the moment of impact, a sudden increase in intrabronchial pressure is caused by compression of the tracheobronchial tree between the sternum and vertebral column. The greatest tension develops in the larger bronchi when the elasticity of the tracheobronchial tree is exceeded and rupture follows. A third mechanism is simply related to shearing forces at the carina during rapid deceleration, leading to direct disruption of the bronchi.1

Recent reports indicate that dyspnea, subcutaneous emphysema, and hemoptysis are the common presenting signs and symptoms²⁻⁹ (Table 1); initial radiographic



Figure 1. Chest x-ray following insertion of second chest tube on right side. Note persistent collapse of right lung, extensive subcutaneous emphysema, and left chest tube.

From the Division of Cardiothoracic Surgery, Department of Surgery, University of Tennessee Medical Center at Knoxville.

TABLE 1 SIGNS AND SYMPTOMS

	No. of Patients	Dyspnea	Subcutaneous Emphysema	Hemoptysis
Baumgartner et al ²	9	6	9	4
Taskinen et al ³	9	9	8	
Ramzy et al4	8		6	
Roxburg ⁵	3	2	2	1
De La Rocha and Kayler ⁶	7	1	4	1
Juttner et al ⁷	2	2	2	2
Kruse-Anderson et al ⁸	8	4	5	
Mills et al ⁹	7	4	4	

findings depend on whether or not the airway rupture communicates with the pleural cavity. Pneumothorax, pneumomediastinum, hemothorax, subcutaneous emphysema, and rib fractures are common. If the parietal pleura remains intact and the rupture enters the mediastinum, no pneumothorax occurs. Mediastinal air may be the only radiographic clue.10

When the patient's signs, symptoms, and chest roentgenogram indicate rupture of the tracheobronchial tree, bronchoscopy, either flexible or rigid, is required. Bronchoscopy is of great value in establishing the exact diagnosis.11 A recent report by Baumgartner et al2 found a 100% sensitivity, specificity, and accuracy by rigid endoscopy in the hands of a cardiothoracic surgeon. Bronchoscopy should be performed by persons well acquainted with the appearance of these potentially lifethreatening lesions, since a negative bronchoscopy by an inexperienced endoscopist does not rule out the diagnosis,² and could be misleading.

Once the diagnosis is made, immediate repair must be undertaken. Delay in operation because of late diagnosis leads to much higher mortality and morbidity, including bronchial obstruction, mediastinitis, sepsis, empyema, and hilar abscess.^{2,3,5}

Conclusion

Although such injuries are rare, the physician treating victims of trauma must be familiar with the complex of symptoms and signs that indicate bronchial rupture. Early endoscopy followed by timely repair provide the most satisfactory outcome.

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TENNESSEE MEDICAL ASSOCIATION

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Postoperative Fever, Hypotension, and Renal Failure

Case Report

An 80-year-old man with severe osteoarthritis was admitted to St. Thomas Hospital for an elective bilateral total knee replacement. The patient was treated with prophylactic warfarin sodium (Coumadin) and tolerated the procedure well. His initial postoperative course was complicated only by low-grade fever and thrombocytopenia. The platelet count reached a nadir of 31,000/cu mm. A bone marrow biopsy revealed a mildly hypercellular marrow with hyperplasia of megakaryocytes. On postoperative day 16, a thrombosis of the right popliteal vein developed, for which he was treated with an intravenous heparin bolus of 10,000 units, and a heparin drip to keep his partial thromboplastin time two to two and a half times the control value. Several hours later the patient's blood pressure dropped to 60/40 mm Hg, and he became anuric and disoriented. The partial thromboplastin time was subtherapeutic. The serum sodium was 124 mEq/L, serum potassium 4.6 mEq/L, and serum creatinine 2.4 mg/dl. His temperature had risen to 103.8°F. Dopamine, broad-spectrum antimicrobials, and dexamethasone 4 mg were administered intravenously. The serum level of cortisol before dexamethasone therapy was 1.2 µg/L. The following day the patient's mental status returned to normal. He was afebrile and normotensive, and had diuresis of five liters. A corticotropin-stimulation test revealed a baseline value of 1.5 $\mu g/L$ and increased to 2.5 $\mu g/L$ one hour after 0.25 mg of Cortrosyn. A CT scan of the abdomen revealed bilateral adrenal masses consistent with acute hemorrhage; biopsy of one of them revealed extensive hemorrhagic infarction of the adrenal gland. The patient was discharged home on steroid replacement therapy.

Discussion

Bilateral adrenal hemorrhage is a difficult diagnosis to make, because manifestations of the disease are nonspecific and tend to occur in acutely ill patients. Before

Prepared by Robert Brodsky, M.D., medical resident, Vanderbilt University Hospital, Nashville.

1990, only 29 patients with adrenal insufficiency due to adrenal hemorrhage, in whom corticosteroid therapy led to survival, had been described in the literature.1 A recent review has identified thromboembolic disease, coagulopathy, and the postoperative state, especially after vascular and prosthetic hip surgery, to be the three major risk factors for adrenal hemorrhage. More than one of these factors increases the risk several-fold. Abdominal pain, fever, and hypotension are the most reliable signs and symptoms. Change in mental status, nausea, and vomiting are also common. Laboratory clues to the diagnosis include a sharp reduction in the hematocrit, hyponatremia, hyperkalemia, and an elevation in the blood urea nitrogen and serum creatinine. The diagnosis of adrenal failure should be confirmed by a corticotropin-stimulation test, though a single plasma sample for simultaneous cortisol and corticotropin assay is probably just as sensitive and specific. The anatomic diagnosis can easily be confirmed by computerized tomography.3 Effective treatment of this disorder requires a high degree of clinical suspicion. Treatment with dextrose and normal saline and intravenous corticosteroids should be initiated at once while awaiting confirmation by tomography and hormonal testing, because once shock develops, rapid decompensation is likely to follow.

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occurred in a deep vein of the right lower extremity. Warfarin

sodium (Coumadin) was prescribed, and she again did well

until eight days before admission when her knee became

Hemarthrosis and Oral Anticoagulants

Case Report

A 69-year-old woman was transferred to Vanderbilt Hospital for evaluation of hemarthrosis.

The patient had rheumatoid arthritis for four years. She had done well until two months before admission when thrombosis

warm, swollen, and painful. Oral prednisone was prescribed, as it was presumed that the rheumatoid arthritis had become active. The symptoms and swelling resolved satisfactorily until the day before admission, when, as she walked around her front porch, her right knee suddenly became painful and swollen. The following morning her physician performed an arthrocentesis and obtained grossly bloody fluid. She was

Prepared by Kathleen Maletic Neuzil, M.D., Hugh J. Morgan chief medical resident, Vanderbilt University Hospital, Nashville.

transferred to Vanderbilt Hospital for further care. She denied fever, chills, or knee trauma. Her medications were prednisone 7.5 mg/day, warfarin sodium 2.5 mg/day, and oral gold 3 mg

On physical examination her temperature was 99.8°F orally. There was edema of both lower extremities, greater on the right, and the right knee was swollen, warm, and tender. There was no erythema or tenderness of the calf. Peripheral WBC count was 8,000/cu mm. The prothrombin time was 24 seconds. On arthrocentesis, grossly bloody fluid was obtained, with 3 million RBC/cu mm and 68,000 WBC/cu mm; no organisms were seen with gram stain, and all cultures were negative. Radiographs of the knee revealed a large effusion with no evidence of trauma or infection. Treatment consisted of bed rest and cold compresses, and vitamin K to reverse her coagulopathy. She was discharged on hospital day three. Anticoagulant therapy was not continued.

Discussion

Spontaneous hemarthroses, which occur frequently in hemophiliacs, are uncommon with other clotting abnormalities. While any abnormality of hemostasis predisposes an individual to traumatic hemarthrosis, the reported incidence of spontaneous hemarthrosis in patients receiving oral anticoagulant therapy is only 0 to 1.5%.1 Risk factors for developing hemarthrosis associated with oral anticoagulant therapy include prothrombin time twice that of the control, and underlying joint disease.2,3

Hemarthrosis usually occurs as an acute monarthritis, with sudden onset of pain and swelling. The joint is warm and the patient may have low-grade fever.

Overlying skin discoloration may be seen, and is a clue to the diagnosis.2 The most common sites are the knee and shoulder joints.3 The differential diagnosis includes gout, pseudogout, septic arthritis, and trauma. Arthrocentesis should be performed to assist in the diagnosis of acute nontraumatic arthritis. If the hematocrit of the fluid obtained is greater than 3%, more blood is present than can be accounted for by the trauma of aspirating

Hemarthrosis responds favorably to bed rest and analgesic medication. The anticoagulant medication should be discontinued, and vitamin K may be used to shorten the prothrombin time. Intra-articular injection of corticosteroid may relieve the inflammation.1 Although spontaneous hemarthroses recur rarely in patients taking oral anticoagulants, they lead to chronic joint damage.3 It is important to find alternative forms of anticoagulant therapy in this population.

Spontaneous hemarthrosis is an uncommon but welldescribed clinical entity that should be included in the differential diagnosis of monarthritis in patients receiving oral anticoagulants.

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Health Risks From Radon Exposure

SUSIE SHIMEK

Indoor radon* is a serious environmental health threat being addressed by the Tennessee Department of Health and Environment. According to the U.S. Environmental Protection Agency (EPA), radon is the second leading cause of lung cancer in the United States. A radon survey conducted by the Tennessee Division of Air Pollution Control in 1987 indicated that 16% of all Tennessee homes may have radon levels higher than the EPA action level of 4 pCi/L (picocuries per liter—a measure of radon gas in the air). This percentage may be as high as 30% in some counties.¹ Concerned homeowners have reported results as high as 600 pCi/L.

Preliminary radon screening measurements in schools have shown classrooms can also measure over the action level. One school system spot tested all its schools and found 60% of the rooms tested to be over the EPA action level. It is conceivable that there may be children who are exposed to elevated radon levels both at home and at school.

Scientific evidence indicates that smoking increases the risk of lung cancer from exposure to radon; non-smokers, however, are also at risk. The August 4, 1989 *Journal of the American Medical Association* published the results of a study whose "results confirm that exposure to radon decay products in the absence of cigarette smoking is a potent carcinogen which should be strictly controlled."²

In addition to publishing the findings of radon research, the AMA, in cooperation with the EPA, has been conducting an awareness campaign among physicians. In May 1989, a physician's Radon Education Workshop was held in Nashville with more than 75 people in attendance. The workshop is continuing at various locations throughout the nation. The EPA pamphlet, "A Physician's Guide to Radon," was provided as an insert to the October issue of an AMA publication.

Congress has taken positive action in addressing the radon issue. In October 1988, in response to growing national concern over the threat of radon gas and its progeny, Congress enacted Title III of the Toxic Sub-

stances Control Act, Indoor Radon Abatement Act (IRAA). The IRAA contains several provisions aimed at the long-term goal of rendering the air within buildings as free of radon as the ambient air. A "safe schools bill" sponsored in the House by Tennessee Congressman Bart Gordon has already passed in the Senate. The bill calls for financial assistance to schools for radon testing of occupied areas and would require the results to be available for public review. The Tennessee Division of Air Pollution Control has developed a program allowing schools to participate in a volume purchase of radon detectors at a reduced price with free follow-up detectors provided to retest rooms with levels over 4 pCi/L.

Public apathy with regard to the risk from radon has been fueled by the controversy surrounding the actual health risk associated with radon exposure. The EPA has assessed the potential lung cancer risk to the general population from radon based on general principles of risk assessment. This is the same approach used to assess the impact on public health of other carcinogenic environmental pollutants. Radon is a known human carcinogen (group A). Group A, carcinogenic in humans, includes only those substances for which there is sufficient epidemiologic evidence from human studies that it causes cancer. The strongest evidence comes from analytical epidemiologic studies such as case-control and cohort studies. In these studies the exposure of individuals to a substance must be clearly associated with an increased risk of cancer. These are the same types of studies used to demonstrate an association between human cancer and a number of well-known substances, such as lung cancer and asbestos, and uterine cancer and diethylstilbestrol (DES).³ The Biological Effects of Ionizing Radiations (BEIR) IV report states, "Numerous studies of underground miners exposed to radon daughters in the air of mines have shown an increased risk of lung cancer in comparison with nonexposed populations. The abundant epidemiological and experimental data have established the carcinogenicity of radon progeny."4

What is being viewed as apathy may actually be a form of denial. Many people say they would rather not know the radon level in their home. They view radon exposure as some kind of inevitability that must be endured if present and better off ignored. However, radon

(Continued on page 184)

From the Division of Air Pollution Control, Tennessee Department of Health and Environment, Nashville.

^{*}The term "radon" as used in this article refers to radon and radon progeny.

Stop, Look, Listen

J. KELLEY AVERY, M.D.

Case Report

A 45-year-old man reported to his family doctor with a history of "feeling bad" for at least three weeks. The patient recounted also that he had experienced chills and fever. On direct questioning, he also told of night sweats. The physical examination was recorded to show high-pitched expiratory wheezes and rales, a "red right ear." and a fever of 102°F. A chest x-ray taken by the attending physician prompted him to admit his patient to the hospital directly from his office.

The hospital record revealed a differential diagnosis that included both miliary TBC and collagen disease. The admission orders included requests for stat sputum, blood, and urine cultures, together with routine comfort measures and theophylline for the respiratory symptoms. These orders were carried out and a direct examination of the sputum was reported as negative for AFB.

On the second hospital day, the attending physician requested a consultation from a specialist in internal medicine. The consultant suggested possibilities that included tuberculosis and other granulomatous diseases, and advised that a pulmonologist be requested to bronchoscope the patient. The fever continued with spikes up to $104^{\circ}F$; a PPD was negative.

On the sixth hospital day the bronchoscopy was carried out. The washings were negative on direct smear and a transbronchial biopsy of the RUL was likewise reported as "negative." The febrile course continued, with elevations of 102°F to 104°F. Repeat chest x-rays continued to show the miliary changes which were interpreted by the consultant as "some kind of granulomatous disease."

During the third week of hospitalization, with the fever continuing to reach levels of 104°F, a further report from the open lung biopsy revealed "multiple 1-mm nodules." During this time, the cultures began to show "yeast." Antifungal therapy was started on the 21st hospital day.

During the fourth week of hospitalization, the patient began to have severe respiratory difficulties, with a fall in the Po₂ levels below 50 mm Hg and concomitant increases in the Co₂ levels. The patient was transferred to the ICU, where he was given a bolus of steroids IV (100 mg Medrol) and was intubated for a short time. He pulled the tube out, and the anesthesiologist was unable to reintubate: they elected to leave the tube out and support him with oxygen. The following day, the patient had increasing respiratory difficulties, continued to have fever, and was reintubated and placed on a respirator. Po₂ and Co₂ levels were controlled within acceptable limits, but otherwise the patient's condition did not significantly change.

During the fifth week of hospitalization, the patient began to show neurologic symptoms, including stupor, muscular rigidity, and some focal neurologic findings. The consulting neurologist suggested the strong possibility of TBC meningitis.

The patient continued to deteriorate both neurologically and from a pulmonary standpoint. Seizures began, and continued over the next several days, being very difficult to control.

Cultures of both the urine and bronchial washings finally showed AFB; specific therapy was begun after a little more than a month in the hospital, and three days after a nurse's note appeared in the chart, "Consultant aware that tests are positive for TBC." The patient left the hospital neurologically compromised some nine weeks after admission and was admitted to a convalescent center.

On careful review of the medical record, it was found that a follow-up report on the lung biopsy was positive for TBC, and was reported in the record on the 21st hospital day.

A lawsuit was filed charging the hospital and all the physicians (except the neurologist and radiologist) with negligence in the management of this case. A seven-figure settlement was negotiated, with the hospital and all the physician parties to the suit contributing.

Loss Prevention Comments

In order to make sense out of a tragedy like this, we must look at each defendant and carefully fill in the blanks left by the record which in no way excuse, but may explain to some degree, how this could happen.

Beginning with the family doctor and the attending physician, we have to ask how could he have missed the boat so badly? Reading between the lines, we have to conclude that his involvement was not as the physician ultimately responsible for the study of the patient in a systematic fashion. A logical approach to the problems of his patient was not reflected in his notes or in his orders. It appeared that he was waiting expectantly for somebody else to do something for his patient. He started on the right track! How could he have been diverted in the course it appeared that he intended to follow? His initial suspicion from the chest x-ray made in his office was miliary tuberculosis (TBC). Again reading between the lines, it is possible that this generalist was deferring to the internist to make the critical decisions and begin appropriate management. In a patient this sick with the respiratory symptoms described, when the sputum is described as "negative," and with the radiologist agreeing that miliary TBC or some other granulomatous disease were the two most prominent possibilities, he seemed to lack the confidence to begin empiric therapy for TBC, which, in retrospect, probably would have effected a cure. He had all the definitive studies in process, and,

Dr. Avery is chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood, and associate director of Medical Affairs, St. Thomas Hospital, Nashville.

even without a positive sputum or culture, treatment for this most serious and life-threatening condition was certainly indicated.

The internist, like the family doctor, began on the right road. On the second day of hospitalization, he suggested miliary TBC as the first condition in his differential diagnosis. The request for his help in the first place was ambiguous. It did not request that he consult and continue to follow, nor did it suggest that he assume the primary responsibility for the care of this patient. His visits and progress notes were irregular, leading to the speculation, at least, that he did not feel like the attending physician intended for him to take an active rele in the management of this desperately ill man. It is always necessary for the consultant to know what role the attending physician expects him to play in management. The consultation request should specify the expected involvement of the consulting physician. From the notes, however, we can conclude that even the consultant was focused on some kind of granulomatous disease, as indicated in his note on the sixth hospital day. It seems that both the attending physician and the consultant were thrown off the track by the absence of positive sputum, bronchial washings, transbronchial biopsy, and negative skin tests.

The pathologist involved found unmistakable evidence of TBC in the lung biopsy reported from permanent sections and special stains not available for the

initial report. There is no record of a call to either the attending physician or the consultant regarding this all-important finding. The report was sent in the usual fashion to the floor and filed in the chart. It was not seen until sometime much later, when a nurse wrote in her notes "Consultant aware that tests are positive for TBC." This was after the patient had become severely neurologically compromised, and even the appropriate treatment could not reverse the damage done. The possibility that a report will be lost in the hectic world of a busy hospital is such a good one that the pathologist or radiologist should by all means directly contact the physician with any report that could be of such a critical nature.

Of course, in retrospect, one could reason that the steroids given for the respiratory failure during the third week could have done great harm to this patient with fulminant TBC. He was a strong young man, the breadwinner of his family, and is now totally disabled and requires constant, skilled care, which could be required for many years in the future.

In spite of the evidence all around indicating failure to follow an acceptable level of care in this case by the attending physician, the internist, the pathologist, and the hospital, one cannot help but believe that the basic negligence was a failure to communicate on the part of the physician team responsible for this man's care.

Health and Environment Report . . .

(Continued from page 182)

is a remediable problem. Since 1984 the situation in thousands of homes across the nation having elevated levels of naturally occurring radon has been corrected. Radon mitigation techniques initially capable of reducing indoor radon levels to below the 4 pCi/L action level have improved so much that a level of 2 pCi/L or below is often achievable. Correction of radon problems can be done by the homeowner or by a contractor who has met proficiency criteria established by the EPA. Often radon levels in schools and other public buildings can be brought below the action level just by proper and careful operation of the heating and ventilation systems.

Because of the high public trust physicians command, they can be a moving force in encouraging the

public to act responsibly with regard to radon. The Tennessee Division of Air Pollution Control Radon Program is available to answer your questions about radon. They have established a state toll-free hotline (1-800-232-1139) that allows calls from anywhere in Tennessee.

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A Key to the Most Deadly Lock

JAC CHAMBLISS

The couple were driving home one night following a dinner party when the husband remarked to this wife that something seemed to be wrong in his stomach. She suggested that he might have overeaten, but he denied it.

"No," he said, "it's a different kind of feeling."

After arriving home, they prepared to retire. His wife went to sleep, but the husband could not. As he undressed, he saw that his painful abdomen was distended and swollen tight. He lay down but the pain was so acute that he could not get to sleep. All night he walked the floor, and at 6:30 the next morning he called a friend, a surgeon, who told him to get to the hospital emergency room as soon as possible.

See editorial comment in this issue.

His wife drove him to the hospital, where he was x-rayed, revealing a mass blockage in his intestines.

Ensuing surgery disclosed that he had extensive adhesions throughout his small intestines, which blocked all passage through his small bowel.

In short, he had what used to be called "locked bowels"—one of the most dreaded killers. Unless this condition is relieved by prompt operation, the intestine above the blockage will swell and burst, causing peritonitis and agonizing death.

The man was lucky.

However, one must bear in mind that a wise man has said that luck has been defined as when preparation meets opportunity.

The man was lucky in being where he could get immediate surgical attention.

Mr. Chambliss is an attorney with the firm of Chambliss & Bahner, 1000 Tallan Building, 2 Union Square, Chattanooga, TN 37402.

He was even luckier in that he was attended by surgeons who knew of and used a percutaneous gastro-intestinal tube called a Thow Tube.

Some 12 or 15 years earlier, this same man had had a similar operation for adhesions. They were much less extensive, but following that operation he had suffered a great deal of pain before the intestines resumed the normal peristalsis.

This time, there was none of that pain.

Why?

A silicone tube nine feet long was inserted through a small incision in his upper left belly wall. It went into his stomach and then was threaded through his small intestine to his farthest extremity. This tube provided two external vents—one for his stomach, the other for the intestine—to relieve pressure buildup. It also prevented the intestine from collapsing after the operation and kinking, thus causing another blockage.

The result for this patient was a speedy and pleasant recovery, instead of a long and painful one.

The inventor of this remarkable tube, Dr. Bruce Thow, was on the staff of the hospital where this man was taken. The tube, designed for intubation of the stomach and distal intestine through a single gastrostomy, serves to alleviate recurrent adhesive obstruction, complicated recurrent Crohn's disease, peritonitis, intestinal fistulas, and traumatic intestinal perforation.

Normally, in cases such as this patient had, the tube is withdrawn, painlessly and easily and on an outpatient basis, after a ten-day to two-week period.

In one extraordinary case, where a patient had suffered over 50 operations for adhesions, this tube was left in the patient for years, with no ill effects whatsoever.

That it is of silicone rubber means that, unlike plastic or rubber, it will not set, is not subject to acids, and is easily inserted and withdrawn.

Surely the Thow Tube is a priceless key for the many people who suffer from what may be mankind's most deadly lock!

Reminiscing

JAC CHAMBLISS

Walking up East 7th Street to the Courthouse the other day, I recalled how in the 1930s the older lawyers would grumble about how that hill got progressively steeper every year.

It does.

As I walked along, the memories came flooding back

In May of 1932 when I came home from Cumberland Law School at Lebanon, Tennessee, I was 21. It was the depth of the Great Depression. The family firm which I joined was Sizer, Chambliss & Kefauver, consisting of my grandfather J.B. Sizer, my father John A. Chambliss, my uncle Burnet Sizer, and young Estes Kefauver as partners. Ralph Shumacker was the only firm associate until I became one. He is still around, as are Dawson Hall, Bill Spears, Corry Smith, Bill (W.G.) Brown, Harry (Happy) Durand, and Frank Gleason (with whom I tried my first lawsuit—a comical epic!)

See editorial comment in this issue.

In those days, Chattanooga was a dirty sprawling industrial city. The air was choked with coal smoke. By noon when I would go to the YMCA on Georgia Avenue for a workout my shirt collar would be black where it had touched my neck.

Yellow streetcars rumbled down the center of Market Street and out beyond the edge of town. One even ran to the top of Lookout Mountain. There was still some horse-drawn traffic on the streets, though it was disappearing.

Policemen stood in the center of the main intersections in town to direct traffic, as there were no traffic lights.

Lawyer's offices were places of dusty, leather-bound books, brass cuspidors, roll-top desks, mechanical typewriters (not electric!), and lady secretaries whom

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men always addressed as "Miss," never by their first name alone. They could take shorthand, type, and do bookkeeping. There were no coffee or coke machines. No quick copy machines or word processors. And—thank heavens!—no computers. Also no air-conditioning, and the heat in summer was rivaled only by the cold in winter, which, in some offices, was challenged by coal-burning stoves or fireplaces.

The Courthouse, redolent of sweat and dirty toilets, was full of battered brass spittoons at which tobacco chewers took indifferent aim. Will Cummings, the County Judge, ran the county with an iron hand, presiding over the County Court, which was made up of justices of the peace elected from various sections of the county. The JPs handled small claims and minor criminal offenses, and were paid fees (costs) by the losing party. (Some defendants were sure that the term JP stood for judgment for the plaintiff!)

The Circuit Court was presided over by Judge Oscar Yarnell, a big, rumpled man with a shock of gray hair falling over his forehead. He wore his glasses low on his nose, and peered over them more often than through them.

The Criminal Court Judge was Charles Lusk, another big rumpled man of towering integrity—as, indeed, were all three of our trial judges.

The third was Chancellor W.B. Garvin. The Chancery Court, known historically as the Court of Conscience, was where cases were tried on deposition, or written testimony, rather than *viva voce*. There were no jury trials in chancery, except in very rare instances.

Then, of course, there was the City Court. It was located on the top floor of City Hall, and was ruled over by Judge Martin Fleming, a genial but tough magistrate, who was totally bald, and a political Irishman—a law unto himself.

In those days, women did not serve on the jury. Lawyers didn't advertise, or solicit business.

There was no procedure for discovery such as today—that is, the taking of depositions of the other side and its witnesses. You had to use your wits to deal with the unexpected.

Judgments were low in dollar value by today's standards, as no one had much money. I remember

taking a case to the Court of Appeals which involved merely \$80 worth of cross ties. (I lost and Gus Wood won.)

The court reporters were experts at shorthand, having no mechanical devices—no stenotypes or tape recorders. I remember Charlie Fain and Mr. Cate, his partner, and Miss Bessie Gorman, and Howard Dome, a sometimes bibulous but charming individual.

Lawyers were a colorful lot. For example:

Colonel Bob Cooke, a kinsman of our partner Estes Kefauver, loved to attend Bar meetings—with accent on the bar!—and then recite poetry by Robert Burns.

Mr. John Early, an elderly lawyer, stone deaf, used to sit next to the jury box with his hand cupped behind his ear and his lower lip stuck out. It's a picture I've never forgotten.

Mr. Sam Ford, a canny lawyer for plaintiffs in automobile accidents, had a trick that he would frequently employ. He would ask the bailiff to call Dr. So-and-so to come to the stand—and when the doctor failed to appear, Mr. Ford would pull a piece of paper from his pocket and proceed to tell the court (and jury!) what testimony the doctor would have given had he been able to be there! (Of course, an objection was sustained—but the jury had heard it!)

And there was H.G.B. King, who represented organized labor then. We were constantly fighting in various courts. On one occasion he was resisting my effort to obtain an injunction from Chancellor Peabody Howard, and was orating eloquently about his client's "rights."

The Chancellor listened awhile, then leaned forward, raised his gavel, and announced slowly, and distinctly: "Mr. King, in this Court a man's *rights* end where his *wrongs* begin!"

Most of the lawyers were trial lawyers, not office lawyers. Trial lawyers had to be fine actors, orators, and quick and ingenious thinkers.

A trial was high drama ... rough ... tough ... full of surprises ... much like bare-knuckle prize fighting, which it sometimes literally became!

But, just as among fine athletes, there was a spirit of camaraderie, respect, and affection, which now too often seems missing.

There has been a tremendous change in the economics of the practice. When I began, one was lucky to be paid as much as \$50 or \$100 a month. Now, some just out of law school get as much as \$40,000 to \$50,000 a year.

I get the feeling that law practice has been changed from a profession which was primarily interested in helping people, into a business, ruled by the clock and the time sheets. Indeed, I am sorry for the young lawyers who are employed and are expected to turn in time sheets of a certain minimum or lose their job. It seems to me this presents a conflict of interest between the firm and the client.

A couple of years ago my friend Lucius Burch Jr. of Memphis, who started practice about the time I did,

received the Distinguished Alumnus Award at Vanderbilt Law School. In accepting it he said: "Though I am the senior partner, I am not in any sense the boss. There is no boss. We are governed by a computer into which time slips are fed and which emits bills almost on a daily basis. There are great machines that whir and blink with their digital readouts, and they, too, feed bills to the computer. The rule of the computer is maintained by the monthly compilation of a so-called Score Card that lists the production and hours billed by every partner, associate and paralegal, and these Score Cards, in a subliminal but real way, influence the judgment of the partners as to each other and affect the progress of associates and paralegals."

He went on: "The great joy of practicing law to me has been in relationships with people. The happiness of talking to someone who comes in distraught and leaves feeling that his problem has been lessened, of giving someone the comfort of knowing that his estate will pass as he wished, the visit of clients at Christmas with a bottle, or a ham, or a jar of scuppernong wine, were the pleasures of the practice."

Then, quoting Sam Linowitz, one of our finest lawyers: "Law was also a learned profession. We spoke of people as 'learned in the law.' The leaders of the Bar were men who read in the classical languages for pleasure, who quoted the Bible and Shakespeare in their briefs as a matter of course, relying on clerks sometimes for their law but never for their literary analogies. They were people who agreed with Thomas Jefferson that 'history, politics, ethics, physics, art, poetry, criticism, and so forth are as necessary as law to form an accomplished lawyer.' "

Finally—and this may be a more important change than you'd think—in those days all lawyers wore hats!

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HAMEL B. EASON

You Eat the Pully Bone

Exodus 4:10 Moses said to the Lord, "O Lord, I have never been eloquent, neither in

the past nor since you have spoken to your servant. I am slow of speech and tongue."

James 3:5 Likewise, the tongue is a small part of the body, but it makes great boasts. Consider what a great forest is set on fire by a small spark.

I have enjoyed writing the President's Page: "Out of the same mouth come praise and cursing." I hope I have given you more affirmation than depression—more hope than despair.

As the recession becomes obvious, and Operation Desert Shield unfolds, I have focused my thoughts on how much the macro-events of history are so much beyond our control and how much they influence the micro-events of our small personal lives. In my days, there have been the Great Depression, WW II, Korea, Vietnam, and multiple cycles in the economy. Like you, I have survived and rejoiced giving thanks for that.

Without any doubt, the Great Depression was the major macro-event in the lives of my parents. It resulted in a yet unbroken string of votes for Democrats. When my mother heard I had voted Republican, she reasoned I had broken with the cherished "Southern Heritage" I had received at birth. My Dad lived through the depression trying to provide for a new family. He saw recovery when he was able to work at the Ford plant for \$5 per eight-hour day and start a painting business at night. He walked because there was no car or truck. All this so touched his life, that he foresaw another great depression after the boom of World War II. To get ready, he moved us all to the farm. As you can imagine, many stories revolve around this experience in my adolescence. One day my Dad bought a new hog. Our old International pick-up sagged and groaned as we brought her home. There was just the two of us to unload. My brother and I played a lot of cork ball in those days. It is a game that two can play when there are no neighbors or friends to join in play. So I opened the feed lot gate and on my Dad's command stood by myself armed with my sawed-off broomstick cork ball bat to "turn her in the feed lot." He lowered the pick-up gate and out charged that sow. She looked like all snout, and grunt, and bristling hair to me. I swung my bat, certain that this time Goliath, the hog, would trample me to death. Amazingly, providentially, she just grunted and turned into the feed lot as I struck her. For me, a major triumph!

Sometimes this year I have thought of TMA as the boy with a stick. We seem so poorly equipped to deal with the hog. Medicare, Medicaid, budget deficits, impaired colleagues, insurance carriers, PRO sanctions, AIDS, HMOs, Sidney Wolf, Pete Stark, and all the rest seem to be snorting and grunting to get us. I believe we can turn that HOG!

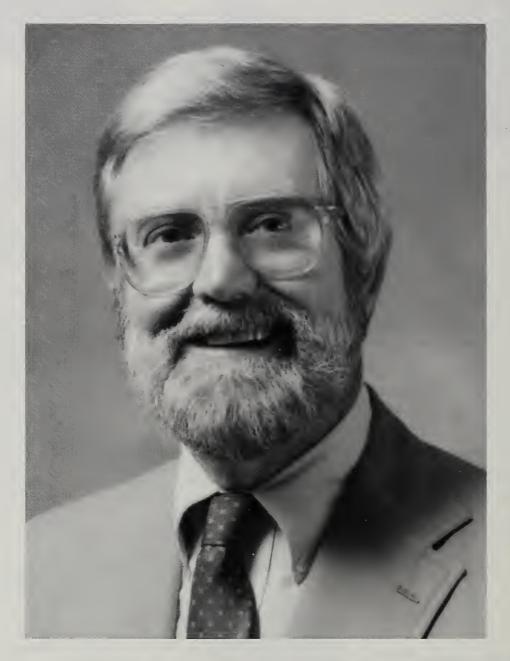
As I complete my term as your president, I am reminded of a bit of rural truth from RFD #3 by Harry Addison.

My Dad used to say, "The neck of the chicken is my favorite piece." What he really meant was "I love you more than I love me, so you eat the pully bone."

You eat the pully bone.

Hamel B. Eason M.D.

THE NEW PRESIDENT



HOWARD L. SALYER, M.D. NASHVILLE

HOWARD L. SALYER, M.D.

137th President—Tennessee Medical Association

The Tennessee Medical Association is on the move, both figuratively and literally, as we begin an exciting and challenging new decade. Howard L. Salyer, M.D., stands poised to lead TMA through whatever lies ahead, as he becomes the Association's 137th president.

Those who know Dr. Salyer well, understand him to be a man of action with a strong-willed desire to advance and protect his profession. He is staunch in his belief that the current American medical system provides the highest quality of care possible. As quoted in a Nashville newspaper article, Salyer states "Quality of patient care has been, and always will be, the top priority for every doctor worth his salt."

Dr. Salyer, 55, is a board certified dermatologist, practicing in Nashville since 1968. A native of Kingsport, Tennessee, he received his undergraduate degree in chemistry and mathematics from Vanderbilt University and earned his medical degree from the University of Tennessee College of Medicine in 1961. He served an internship at the Brooke Army Hospital in Ft. Sam Houston, Texas, and did his residency in dermatology at the Henry Ford Hospital in Detroit, where he was chief resident.

Following his internship, Dr. Salyer began a period of military service. He spent several months at the U.S. Naval School of Aviation Medicine in Pensacola, Florida, before becoming a flight surgeon with the U.S. Army Aviation School in Ft. Rucker, Alabama. During his time at Ft. Rucker, he was named chief of the outpatient medical center of the Army Hospital.

Dr. Salyer holds numerous academic positions, including clinical instructor, Department of Medicine,

Division of Dermatology, Vanderbilt University Hospital, 1968 to present; clinical instructor, Department of Medicine, University of Tennessee, 1984 to present; and consultant, Department of Dermatology, Veterans' Administration Hospital, 1968 to date.

His commitment to organized medicine is apparent through his past work with the Nashville Academy of Medicine, where he served as secretary-treasurer from 1985 to 1987 and president in 1989. He has long been active in TMA as well, serving previously as chairman of the Judicial Council, as a member of the Board of Trustees, and in this past year as president-elect. He has also served as an officer in the Middle Tennessee Medical Association (secretary) and the Upper Cumberland Medical Society (president).

Dr. Salyer is or has been affiliated with numerous professional organizations including the American Academy of Dermatology, the American College of Physicians, the American Medical Association, the American Association of Cosmetic Surgeons, the American Medical Society on Alcoholism and Other Drug Dependencies, Inc., the Detroit Dermatological Society, the National Association of Interns and Residents, the Nashville Dermatological Society, the Tennessee Dermatological Society, and the Undersea Medical Society.

An avid outdoorsman, Dr. Salyer enjoys hunting, fishing, hiking, and horseback riding. He and his wife, Edna, have four children.

TMA is preparing for a bright future and is very fortunate to have such a strong and dedicated physician to lead the way. We are honored to welcome Howard Salyer, M.D., as our 137th president.

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APRIL, 1991

editorials

Counting the Cost

What with a war going on and a recession, to boot, not to mention all the trials and tribulations to which flesh is heir, there is no way one could determine from the title of this piece what it is about, so I will tell you right up front. It is about *medical* costs. The parties paying those costs are the ones counting them. They complain that costs are whatever the doctors and the hospitals make them. They complain that the doctors are not doing any counting. Those doing the counting are not doctors. They need to have the

facts of life—and death—'splained to them.

There have been a lot of estimates as to what percentage of medical procedures and services are unnecessary. We need wonder no longer. The authoritative word is out; it is, according to today's newspaper, 10% to 20%. We have that on no less an authority than a vice-president of Aetna. He is obviously the proper one to make such an estimation. He is not a doctor. Though he is first and foremost an insurance company executive (and don't you forget it!), he is likely an accountant—maybe even an actuary. I wondered, therefore, at the spread. It seemed to me he could at least have said it is 15.332%, rounding off the numbers to the fifth decimal place. But he chose to play it cool.

He has, of course, an advantage. He has the advantage of peering at outcomes, and the view is always clearer through the retrospectoscope. The insurance companies are often in the position of wishing the doctor had not done what he did. The doctor sometimes wishes the same thing. There is a difference in why they wish it. There is also a difference in the upshot. It makes an enormous difference whether one is looking at a known outcome or an anticipated one; anticipated outcomes are based on previous known ones, and the situation not infrequently curdles, fogging the crystal ball. Next time the doctor might need to do the same thing he wished before he hadn't done, and if he isn't allowed to, both he and the patient (or sometimes the patient's survivors) might wish he had been allowed to, or if he hadn't been allowed to, had gone on and done it anyway. But because both he and the insurance company wished last time he hadn't done whatever it was he did and wishes to do again, the insurance company says forget it.

The insurance company spokesperson (I use that detested word because the individual is more likely than not to be female) has the advantage of not being a doctor, and therefore not understanding the situation. If the spokesperson for the company happens to be a doctor, as on appeal it might be, he (or she) also has the advantage of not understanding the situation, since he is not on board looking at the patient. It is easy for him, therefore, to say forget it, since he is not the one who will have to face the survivors of the dear departed, and he is also not the one who will have to face the attorney of the dear departed plaintiff-in-absentia. It is the doctor's duty, and not his, to be the patient's advocate. Like kangaroos, patient advocates don't get paid much attention to by generally reluctant third party sometime payers, particularly if the advocates are doctors. The carriers, of all people, have the temerity to accuse the doctors of being interested only in their own pocketbooks. Unfortunately, the accusation has a smidgen of merit, hence the generalization.

That's in the first place.

In the second place, though the cost of health care insurance (which is, after all, what is really under discussion when insurance companies say they are talking about health care costs, and not about actual medical costs at all) does depend on medical costs, there are many other less obvious costs, not the least of them the avarice of the insurance companies themselves. Their stock does *very* well. Neither corporations seeking insurance nor the labor unions serving(?) the insureds seem ever to take that into consideration. It is much more popular with both management and labor to pile it all, along with everything else distasteful, onto the doctors and the hospitals.

Second in the second place is that health care costs are not entirely attributable to the costs of health care. A significant, even onerous, and even actually enormous, part of the cost is attributable to the monstrous bureaucracy amassed to administer and police the process. All of the dollars for that are designated health care dollars, when in fact they are anything but that. They are a part of the Pork Barrel Protective Sinking Fund For Insuring Sole Survival of the Federal Teat (PBPSFFISSOFT), and the part that is federal should be charged individually and personally to the members of the Congress. Instead, they are charged to those caring for Medicare and Medicaid patients (again, the doctors and the hospitals), and constitute a major part of the health care insurers' swollen statistics on which to base Swollen Premiums For Fattening the Purses of Corporate Stockholders and Executives (SPFFPCSE). As usual, the government came out ahead; it has more letters than the private sector does in its acronym. (Actually, I could have arranged them any way I wanted; I was just keeping things in perspective.)

So whenever you hear statistics quoted about health care costs being whatever the hospitals and the doctors make them, take a careful look to see who's quoting them, and why, and what their data base is.

J.B.T.

Gripes, et. al. A Lesson in Loss Prevention

Kelly Avery's Loss Prevention Case of the Month and my accompanying editorial in the January issue of the *Journal (J Tenn Med Assoc* 84:23-24, 32-33,

1991 (has stirred up some comment of sorts, and I decided to publish the various bits and pieces together this month in our "Mailbox." I thought a few introductory comments might be necessary to tie them together. One piece is from one of our members, a not infrequent contributor to the *Journal*, who is lamenting what most of us are lamenting these days, but he does it well, and in publishable form. Some of us obviously need to do more than lament about it; maybe we all need to. Certainly even the purest of us can do something to help polish the tarnish off the old professional escutcheon.

The second letter came from the retired lay father of another of our members, who had sent the material to his father, I should think to reassure him (though I doubt "reassure" is the proper word, considering the inciting circumstances) that what had happened to him was by no means unique. What had happened to him, and, unless I miss my guess, what is still happening to him, considering that a lawyer had gotten into the act, is recounted in his letter.

The third letter is more difficult to categorize; it came as a commentary *apropos* of nothing so far as the *Journal* is concerned, but *apropos* of a whole lot so far as the writer is concerned. It is also *apropos* of a lot where you and I are concerned, such as whether or not we continue to feed our families. You might, on first reading, consider it gratuitous, and in a sense it is. But before you get mad and write it off, you had better read it again, thoughtfully. Though Miss Best has taken it upon herself to psychoanalyze doctors generically, her message is the same as the others: don't be put off by the packaging. (Actually, I was able to persuade her to soften it a bit.)

It has been a major tenet of medicine always that if your practice of it is good, as with mousetraps the world will beat a path to your door. If you include in that the art of medicine as well as the science of it, that is probably true. The art includes massaging the patient's ego, so that he will not accuse you of thinking your time is the only valuable time extant. If you think that is unimportant, you should sit in sometime on the deliberations of your professional liability carrier's claims review committee.

It is of little help to you if your patient thinks you are a good doctor, but.... He just might eventually, and likely sooner than later, decide you couldn't be a very good doctor, either. If he does decide that, or even if he doesn't, just let a little something—anything—go wrong, or even just not to suit him, and your case could wind up with SVMIC. even though your care of him had been impeccable, and even the best the world has to offer.

J.B.T.

Cryin' Shame

Q. What is a cryin' shame?A. A bus load of lawyers going over a cliff with one empty seat.

That is, of course, a generic type joke into which one can substitute his own anathema. I believe its use for lawyers by doctors is traceable to Melvin Belli, the California lawyer who a couple of decades ago, give or take a few years, won the first million dollar medical malpractice judgment. Whether or not I have my details entirely accurate is of little moment, since out of that judgment has grown a professional liability crisis of stupendous proportions. (That crisis, incidentally, has proliferated to encompass the lawyers, as well, and not only them, but anyone else who does anything for anybody. Do you think the lawyers care? Forget it! Who is it profits from any litigation? But I digress.)

In any case, along with the crisis, or maybe out of it, has grown a legendary enmity 'twixt doctors and lawyers. Like all other generalizations, though, it remains only a generalization, and seldom applies between individuals, or at least not to any greater extent than enmity arises between individuals on just about any other grounds, up to and including wedded bliss that curdles. Like all of those situations, this one has prompted its own anthology of jokes, some of them borrowed from the Aggies and mothers-in-law and so on, and some not. They become rancorous only in individual situations.

Just as patients have problems with doctors but love and trust their own (at least mostly, or so the polls would lead us to believe), so doctors love and trust their own lawyers (at least mostly, or so our instincts would lead us to believe), even though we wouldn't admit it, least of all to each other, and likely not even to ourselves on occasion. Despite the joke above, which I would take seriously only if I could specify the passenger list (and I am confident I couldn't come close to filling it), I have my own favorite lawyers, some of whom I have immortalized in these pages. ("Immortalized" is likely sheer hubris; if you will allow me, then, I shall change it to "memorialized," since though I should like to believe my prose is deathless, reason dictates otherwise, and I try to stay within reason, even if I don't always do it.)

Before the late unpleasantness between the states, Lookout Mountain was a summer resort consisting of a hotel and a few summer cottages. Access was by a railroad that zig-zagged its backtracking way to the top. After the war it became a summer colony, and sometime shortly before the First World War permanent homes began to appear. The community was

served by an incline railway, known to the inhabitants as just "The Incline," which connected at the top with a trolley that made its way generally along the east brow of the mountain for several miles. The alternative way up was a winding, crowned automobile road with a macadam surface and several U-turns (actually more V-turns) that generally, with some condescension, allowed cars to pass each other on meeting. I remember it as no small source of childhood terror in the early 1920s. Sometime shortly before the Great Depression in 1929, as the population of the town of Lookout Mountain began to expand past the 400 souls it had claimed for so long, that road was widened, straightened somewhat, and paved with concrete, acquiring the euphemistic title "Scenic Highway." Except for resurfacing with asphalt and the addition of guard rails, it was then pretty much as it exists today.

There were two churches on the Mountain in the 1920s, one white and one black. The white one was Presbyterian in name, but actually functioned as a community church that included a variety of denominations among its membership. Only the Catholics went "to town," which meant down the mountain into Chattanooga. This required a full measure of devotion, since going down and back, even in good weather, took some doing; in bad weather it must have taken them most of the day, beginning early. For our family, going to church was a five-minute walk down the car-track in good weather, or a two-minute drive in bad.

During all my years in the Sunday School, which began, I guess, when I was four or five years old, there was only one superintendent, a lawyer named John A. Chambliss. He was still superintendent when I last had to do with the church some 20 or so years later, when I settled in Nashville. Each Sunday Mr. Chambliss would deliver a minisermon in the Assembly, after which the Assembly would break up and we would all go to our individual classes, unless we decided to cut out. His was always at least as stimulating as the preacher's sermon. Mr. Chambliss had four children, the youngest a son about my age, the oldest a son ten years my senior. For a year or so during my high school years, Jac, who I presume is John A. Chambliss Jr., though even on his letterhead he is just "Jac," was my Sunday School teacher. He was just as stimulating as his father, and cutting his class, while not unheard of, was uncommon. They could both have been successful preachers.

Through our mutual friend Charlie Cornelius, general counsel for the TMA, I have kept up with Jac over the years. (They are both among the "good" lawyers, along with one of my sons-in-law.) Recently

Charlie passed along to me an account, written in the third person, of a hospital experience that, *mirabile dictu*, was complimentary of its writer's care. We carry it in this issue of the *Journal* (A Key to the Most Deadly Lock). The suffering writer was Jac Chambliss, who consented to be identified as the author, though I'm certain he didn't expect the identification to be this long-winded; as a matter of fact, neither did I. It's what comes of reminiscing. I reserve the right to "disremember."

You get a bonus, too. I have commented on occasion here and elsewhere that much of what is referred to in the sometime mouthings of us old codgers as the good old days was really more often than not the bad old days. They nevertheless did have a lot to recommend them. Jac sent along for my entertainment some reminiscences of his, written for the local bar publication, about the practice of law when he hung out his shingle in Chattanooga in 1932. We are also publishing that article in this issue of the Journal (Reminiscing). Except for the specifics, I found in it much that was not too different from the practice of medicine in Nashville in the late 1940s. Those days were certainly not better so far as health care was concerned, but on the other hand the practice climate was a lot better; it was, in fact, by and large a "kinder, gentler" time, despite a certain amount of infighting within the profession. However much there was, it was nothing compared to the turf battles being waged nowadays, and both medicine and the law were unquestionably professions. Today questions about that do arise from time to time, and not without justification.

There are still left some of our readers in and around Chattanooga, and possibly elsewhere, who will doubtless find in the piece some familiar people and places. Too, I believe all of us can conjure up some similar situations out of our own background and memories; wishes too, I daresay-and even hopes and aspirations, both personally and for our profession. Keeping Tennessee green is a noble goal for our state's garden clubs, but that is not what the color of medicine should be. Medicine should be lilywhite. Though I doubt it ever quite met the Ivory Soap standard, it was once a lot closer to it than it is these days, when its color is closer to that of the jolly green giant. The various incursions against us are certainly real enough, and are not to be discounted. Nevertheless, I fear that too often we are guilty of using that simply as a convenient excuse for continuing to do whatever it is we are doing that our public finds objectionable, which is, sad to say, considerable.

J.B.T.



Loss Prevention

To the Editor:

Dr. Avery's article and your comments in the January issue of the *Journal (J Tenn Med Assoc* 84:23-24, 32-33, 1991) brought to my mind what disturbs me a great deal. It is the opinion the public seems to have of my profession.

When I began practicing medicine in the early 1950s physicians were so highly respected and often granted favored status. It was because we were trained and acted as professionals. I think of a professional as one who carries out his mission without regard to compensation or recognition. Of course an income is expected, but it comes along with providing good medical care.

With the practice of medicine being looked upon as a business, people consider doctors as tradespeople, and doctors are treated as such.

I don't mean to belittle tradespeople, but their object to make a profit is different from that of a professional.

It appears that we need more professionalism in the practice of medicine.

Waverly S. Green Jr., M.D. 3-A Doctors Building Bristol, TN 37620

Loss Prevention

To the Editor:

I was delighted to read your editorial, "The Customer is Always Right," and the article by Dr. J. Kelly Avery, "Medicine—A Business or Profession?" in the January 1991 issue of the *Journal (J Tenn Med Assoc* 84:23-24, 32-33, 1991) which was given to me by my son, Dr. Bruce Randolph Goodman.

Dr. Avery's experience was almost identical to mine in Florida when I had cataract surgery on Dec. 14, 1987. I honestly felt terrorized on that morning in the operating room. I met the anesthesiologist for the first time as he injected the intravenous needle in my arm and mumbled his name. I asked him whether or not he was familiar with Eisenmenger Syndrome, which I have. He replied, "Yes, you have hypertension." I started to explain I do not have high blood pressure but have pulmonary hypertension but before I could finish my sentence, he almost shouted at me, "You have hypertension." I then asked, "Have you looked at my medical records?" His reply was, "No, I do this now." No further words were spoken and within one minute I was anesthetized. When I awoke after surgery, which took possibly 15 minutes, I did not hear or see the anesthesiologist then or thereafter. I cannot express myself

with the eloquence of Dr. Avery, but I felt I should make my dissatisfaction known to the hospital where the surgery took place and to the anesthesiologist by mail. The only reply I have received to date is a letter from an attorney threatening legal action for defaming the anesthesiologist and a statement every three weeks for a balance of \$79.72, which I refused to pay on the anesthesiologist's total bill of \$358.12.

Before seeking your permission, I have taken the liberty of sending a copy of your editorial and Dr. Avery's article to the Florida Medical Association's office in Miami along with copies of my letter to the hospital and anesthesiologist. I know this will have little impact on the Florida Medical Association, but I hope for the day when people like my son, who are brilliant, highly trained, and extremely dedicated to the professional practice of medicine, will be able to apply their skills in whatever area wherever they desire without feeling threatened by government, the legal system, or bad press.

Jack Goodman 5896 S.W. 99th Lane Cooper City, FL 33328 catheterized. After catheterizing me the nurse left the room and I waited fruitlessly for her to come back into the room and assist me off the examining table. This she failed to do. Finally, in a huff I clumsily managed to push in the end of the table and take my legs out of the stirrups and reach the floor below. I immediately dressed, walked out of the examining room and informed the nurse without breaking my stride that if she so felt like it she could inform me of the results of the catheterization.

I am waiting to hear from her, but I really doubt whether I do or not. I am sure that she did not like my attitude. Although she was friendly and nice, and although the physician is friendly and nice, nothing can excuse his insecurities or her forgetfulness. I plan to change physicians in the future.

I wish that more people would object to this type of behavior. Maybe if people started leaving waiting rooms empty, then doctors might realize that their time is not the only valuable time extant.

> Miss Vera Best 126 Tusculum Road Antioch, TN 37013

A Visit to the Doctor

To the Editor:

Doctors, to cure the ills of mankind are essential and truly to be desired. At one time their dedication to the Hippocratic Oath they swear to was admirable and then when informed of the need, they hurried to the patient's bedside regardless of the hour. Such is definitely not the case any more. No longer will the doctor come to you when you are ill, you must get out of a sick bed and visit him during his office hours or find some other place to go. It really is no concern of his.

This background is leading to a very present phenomenon which I believe can be changed, or at the very least, patients should band together to attempt to control. That is the psychological need a physician has to keep a full waiting room. When the doctor instructs his staff to schedule more than one patient per quarter hour, which would be the reasonable schedule he could plan to spend per patient, it is because of his insecurity, which can only be fed by a full waiting room at all times.

This is unfair to the patient. When he walks into a full waiting room, the intelligent patient realizes immediately that the physician has instructed his girl to schedule more patients per quarter hour, half hour, or hour than he can possibly see in that time period, or that there was an emergency and the doctor got behind because of it. But, when the same intelligent patient finds a like situation every time he schedules a visit to a physician, then, there is a problem.

Recently, I arrived at my urologist's office at the appointed time. The instant I observed the full waiting room, I realized that many more patients than could be seen in the allotted time frame had been scheduled. I resolved at that moment to put a time limit on how long I was willing to wait to see this particular physician. Ten minutes before the time was up, I was called back into a little examining room. There I removed my clothes, situated myself on the examining table with my legs in the stirrups to be



Edward H. Barksdale, age 92. Died February 3, 1991. Graduate of Washington University School of Medicine. Member of Nashville Academy of Medicine.

Charles W. Black, age 76. Died February 9, 1991. Graduate of University of Tennessee College of Medicine. Member of Knoxville Academy of Medicine.

John T. Cunningham, age 61. Died February 1, 1991. Graduate of University of Tennessee College of Medicine. Member of Rutherford County/Stones River Academy of Medicine.

Mack Macon Green, age 90. Died February 11, 1991. Graduate of Vanderbilt University School of Medicine. Member of Montgomery County Medical Society.

Felix Earl Williamson Jr., age 70. Died February 3, 1991. Graduate of Vanderbilt University School of Medicine. Member of Consolidated Medical Assembly of West Tennessee.

announcement/

Robert T. Mitchell, M.D., Gallatin, has been named a Fellow of the American College of Physicians.

TMA Members Receive AMA Physician's Recognition Award

The following TMA members qualified for the AMA Physician's Recognition Award during January 1991. This list, supplied by the AMA, does not include members who reside in other states.

Physicians can receive the PRA certificate valid for one, two, or three years. For the one-year award, physicians report 50 hours of continuing medical education, including 20 hours of Category 1; for the two-year award, physicians report 100 hours of CME, including 40 hours of Category 1; for the three-year award, physicians report 150 hours of CME, 60 of which are Category 1.

James W. Clark, M.D., Church Hill Gerald O. Daniel, M.D., Franklin Jerry Engelberg, M.D., Memphis Fontaine S. Hill, M.D., Memphis Wm. Sherman Keane, M.D., Nashville Venk Mani, M.D., Dickson Ray E. Methvin, M.D., Loretto George K. Scholl, M.D., Johnson City Liselotte E. Sigmar, M.D., Oak Ridge Nat H. Swann Jr., M.D., Chattanooga

new member

The Journal takes this opportunity to welcome these new members to the Tennessee Medical Association.

BRADLEY COUNTY MEDICAL SOCIETY Frank Chin, M.D., Cleveland

CAMPBELL COUNTY MEDICAL SOCIETY Gladys E. Martin, M.D., LaFollette

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Desmond L. Fischer, M.D., Chattanooga H. Joseph Lantz, M.D., Chattanooga

DICKSON COUNTY MEDICAL SOCIETY Lawrence Richard Jackson Jr., M.D., Centerville

FRANKLIN COUNTY MEDICAL SOCIETY J. Lynn Williams, M.D., Winchester

GILES COUNTY MEDICAL SOCIETY Henry A. Sakow, M.D., Pulaski

KNOXVILLE ACADEMY OF MEDICINE David W. Annand, M.D., Knoxville Mike Ayres, M.D., Knoxville Frank J. Beuerlein, M.D., Knoxville

Lee Congleton III, M.D., Knoxville John T. Dawson, M.D., Knoxville David H. Hauge, M.D., Knoxville James H. Miller Jr., M.D., Knoxville Casey Jay Page, M.D., Knoxville Randle H. Storm, M.D., Knoxville

LINCOLN COUNTY MEDICAL SOCIETY Carl Eugene Wingo, M.D., Fayetteville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Thomas Lynn Ernst, M.D., Memphis Dale Nichols Estes, M.D., Memphis Stanley Graves, M.D., Memphis William G. Hardin, M.D., Memphis David G. Stewart, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE

Judith Blevins Akin, M.D., Nashville Patrick A. Barnett, M.D., Nashville Kurt Vincent Berger, M.D., Nashville Jeanne Marie Foose, M.D., Nashville James Alan Gaume, M.D., Nashville Julia C. Goodin, M.D., Nashville Claudia K. Jones, M.D., Nashville

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

Ann Sanchez Roberts, M.D., Oak Ridge

SULLIVAN COUNTY MEDICAL SOCIETY

Darryl Stephen Addington, M.D., Kingsport Landon Armstrong Colquitt, M.D., Kingsport Frank Michael Melvin, M.D., Kingsport

SUMNER COUNTY MEDICAL SOCIETY Anne P. Bartek, M.D., Gallatin

WILLIAMSON COUNTY MEDICAL SOCIETY Nancy Esta Kahn, M.D., Nashville

announcements

CALENDAR OF MEETINGS

ΝΑΤΙΩΝΑΙ

	MATIONAL
May 1-3	American Academy of Facial Plastic and Reconstructive Surgery—Hyatt Regency, Waikoloa, Hawaii
May 1-5	Society of General Internal Medicine—Westin, Seattle
May 2-3	American Society for Clinical Nutrition— Madison Hotel, Seattle
May 2-5	Association for Hospital Medical Education—Registry, Scottsdale, Ariz.
May 3-5	Christian Medical and Dental Society—Hyatt Regency, Oak Brook, Ill.
May 3-6	American Society for Clinical Investiga-

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	tion—Seattle		Officials—Holiday on the Bay, San Diego,
May 3-6	Association for American Physicians—Seat- tle Convention Center	May 19-23	Calif. American Association on Mental Retarda-
May 4-5	American Laryngological Association— Hyatt Regency, Waikoloa, Hawaii	j	tion—Hyatt Regency, Crystal City, Arlington, Va.
May 4-8	Society of Cardiovascular Anesthesi- ologists—Marriott, San Antonio	May 20-22	Society for Surgery of the Alimentary Tract—Convention Center, New Orleans
May 4-8	Society of Teachers of Family Medicine— Wyndham, Franklin Plaza, Philadelphia	May 29-31	Measuring and Improving Health Care Quality (Int'l. Society for Quality Assurance
May 5-6	American Otological Society—Hyatt Regency, Waikoloa, Hawaii		in Health Care)—J.W. Marriott Hotel, Washington, D.C.
May 5-9	Aerospace Medical Association—Convention Center, Cincinnati	May 29-June 3	American College of Sports Medicine— Peabody Hotel, Orlando
May 5-9	American Broncho-Esophageal Associa- tion—Hyatt Regency, Waikoloa, Hawaii	May 31-June 1	American Society of Law & Medicine—Hilton, Albuquerque
May 5-9	American Society for Microbiology—Dallas	June 1	Muscular Dystrophy Association—Tucson
May 5-10	American Association of Women Radi-	June 2-5	International Society for Cardiovascular
May 5-10	ologists—Sheraton, Boston American Roentgen Ray Society—Sheraton, Boston		Surgery (North American Chapter) and Society for Vascular Surgery—Sheraton Hotel/Hynes Convention Center, Boston
May 6-8	American Association for Thoracic Surgery—Hilton Hotel, Washington, D.C.	June 4-5	Society for Vascular Surgery—Sheraton, Boston
May 6-9	Association of Reproductive Health Professionals—Convention Center, New Orleans	June 5-9	American College of Cryosurgery—La Jolla, Calif.
May 7-9	American Laryngological, Rhinological, and	June 6-8	U.S. Pharmacopeial Convention—Hyatt
•	Otological Society (Trilogical Society)— Hyatt Regency, Waikoloa, Hawaii	June 7-8	Regency Resort, Scottsdale, Ariz. American College of Medical Quality—
May 7-9	American Society for Head and Neck	Julie 7-0	Stouffer Concourse, Los Angeles
·	Surgery—Hyatt Regency, Waikoloa, Hawaii	June 9-14	American Society of Neuroradiology-Hil-
May 8-10	American Trauma Society—Crystal Gateway Marriott, Arlington, Va.	June 11-14	ton, Washington, D.C. Society of Nuclear Medicine—Cincinnati
May 8-11	Society of Neurological Surgeons—Charleston, S.C.	June 17-20	Drug Information Association—Hilton, Washington, D.C.
May 8-12	Society of Biological Psychiatry—Sheraton, New Orleans	June 19-22	Endocrine Society—Sheraton, Washington, D.C.
May 9-12	American Academy of Psychoanalysis— Royal Orleans, New Orleans	June 20-23	American Association of Neuropathologists—Omni, Baltimore
May 9-12	American Geriatrics Society—Chicago Hilton and Towers	June 22-28	American Diabetes Association—Grand Hyatt and J.W. Marriott, Washington, D.C.
May 10-12	American Society for Adolescent Psychiatry—Royal Sonesta, New Orleans	June 27-30	American Society of Contemporary Medicine and Surgery—Hyatt Regency, Chicago
May 10-14	American Fracture Association—Capital Hilton, Washington, D.C.	June 27-30	American Society of Contemporary Ophthal- mology—Hyatt Regency, Chicago
May 11-12	American Academy of Psychiatrists in Al- coholism & Addictions—Intercontinental, New Orleans	June 30-July 3	International Headache Congress (sponsored by American Association for the Study of Headache and the International Headache
May 11-15	Association for the Advancement of Medical Instrumentation—Hilton, Washington, D.C.		Society)—Washington, D.C.
May 11-16	American Psychiatric Association—Convention Center/Hilton, New Orleans		
May 12-15	American Lung Association—Anaheim, Calif.		
May 12-15	American Thoracic Society—Anaheim, Calif.		
May 12-15	Society for Academic Emergency Medicine—Grand Hyatt Hotel, Washington, D.C.		
May 12-17	American Society of Colon and Rectal Surgeons—Marriott Copley Place, Boston		Are You Reading
May 15-18	Neurosurgical Society of America—San Destin, Fla.		This Ad?
May 16-18	American Association of Orthopaedic Medi- cine—Hyatt Regency Downtown, Denver		
May 16-19	Society for Cardiac Angiography and Interventions—Doubletree, Monterey, Calif.		are THOUSANDS of others. n over 6,500 physicians with a

American Gastroenterological Association— Convention Center, New Orleans

American Industrial Hygiene Association-

American Society for Gastrointestinal Endos-

copy—Convention Center, New Orleans American Society of Clinical Oncology—

Hyatt Regency, Houston Association of State and Territorial Health

Salt Lake City

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For further information contact Tennessee Medical Association PO Box 120909, Nashville, TN 37212-0909

May 18-22

May 18-24

May 18-24

May 19-21

May 19-22

The TMA Impaired Physician Peer Review Committee A Progress Report

CHARLES B. THORNE, M.D., Chairman and the IMPAIRED PHYSICIAN PEER REVIEW COMMITTEE

Introduction

In April 1978, the TMA Board of Trustees authorized the establishment of an ad hoc committee designed to identify and offer professional assistance to TMA members afflicted with the disease of chemical dependency. John Dorian, M.D., then president of the TMA, was the prime mover behind the development and organization of this committee and served as its chairman until December 1982. We owe him a debt of gratitude for his insight and devotion. The committee's structure and basic function was modeled after the successful program developed for the Georgia Medical Association by Douglas Talbot, M.D. Dr. Talbot offered significant assistance during the early months of our state program. For many years thereafter, Ridgeview Institute in Atlanta, of which he was director, served as our primary treatment facility.

In January 1979, the TMA Impaired Physician Peer Review Committee (IP/PRC) was formed, staffed by a dozen volunteer physicians from throughout the state. Initially, the duties of identification and verification were handled by one member, with confrontation and posttreatment follow-up handled by a group led by William C. Anderson, M.D., of Nashville. By 1983, it became apparent to the committee and to the Board of Trustees that full-time professional help was needed along with permanent financial support. In April 1983, the Board authorized the employment of a part-time medical director, and the House of Delegates approved a \$15 dues increase to fund the position's salary and expenses. In November 1984, the committee was fortunate in selecting and employing David T. Dodd, M.D., of Murfreesboro, to become the medical director and obtained his services on a full-time basis in January of 1986. As of this date, the program's charge, "To afford impaired physicians every opportunity to be rehabilitated to productive medical practice," has reached maturity.

Where We Have Been

During the past 11 years, over 385 of our physicians have "graduated" from the program, with approximately 95% returned to successful practice, a remarkable percentage. As we have come to know, chemical addiction strikes without regard to education, profession, social status, race, or sex, and physicians are no exception. Of interest, and perhaps not surprising, is the changing pattern of "drugs of choice" that we have noticed during the past decade. Initially, our ill physicians could be divided into three roughly equal categories, with onethird abusing alcohol, drugs (primarily opiates or benzodiazepines), or a combination of the two. In recent years, we have seen a distinct trend towards the use of mood-altering drugs, including the newer synthetic hypnotics. Among the older physicians, alcohol remains the drug of choice, whereas the younger physicians are more apt to select the mood-altering drugs; times change! Regardless of the nature of the habituating drug, however, the basic disease process as we currently understand it, as well as the treatment, remains the same.

Fortunately, during the past several years, we have witnessed a dramatic growth in the number and quality of drug-treatment facilities. Whereas only ten years ago, we felt comfortable recommending only a very few treatment programs, we now have available a dozen or more high-quality facilities in the Southeast. These approved programs generally follow a similar design-a four-week intensive inpatient treatment, followed by a two- to four-month outpatient period preparing for reentry into a practice setting. The latter may be in a setting of limited work hours and patient responsibility until a secure recovery has been assured. The various features of these treatment and reentry schedules are jointly determined by the treatment center and the medical director. These individuals, who enter treatment under the auspices of the IP/PRC and expect the program's advocacy, are required to sign a two-year

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contract. The stipulations contained within these contracts vary, but all include a specified number of Alcoholics Anonymous or Narcotics Anonymous meetings that the individual must attend. Random drug screens are obtained, and progress is monitored by the medical director.

During the past year, Dr. Dodd has created a number of Regional Aftercare Monitoring, or RAM, teams to accomplish much of the essential monitoring. These RAM teams consist of two or three physicians, all having had strong recoveries, who volunteer to monitor physicians during their early recovery period. Distributed statewide, they meet with these physicians under contract, monitor their recovery, and obtain drug screens when indicated. They serve as the "eyes and ears" of the medical director, and have proven to be a most helpful extension of the medical director's responsibility. Also, it has been most gratifying to see the enthusiasm that these team members have developed—a witness to the strength of their recovery. Caduceus Clubs are also located statewide and hold weekly meetings attended by our recovering physicians, and, in some cases, by other health care professionals. The joint commitments that develop within these groups are remarkable, and serve to help sustain the continued recovery of the individuals. Annually, in July, the Caduceus Clubs hold a retreat, usually in one of the state parks, attended by members and their families. This extended weekend serves as a forum for sharing newfound values, as well as reinforcing their commitment to long-term recovery.

By 1985, it became obvious to the Board of Trustees and the IP/PRC that our funding was woefully inadequate. Over the years that the program had been in existence, we had avoided any direct contact with our physician-owned liability insurance company, SVMIC, for fear of losing our confidentiality, and hence our credibility. Fortunately, our fears proved to be totally unfounded. With some trepidation we approached the Board of SVMIC requesting significant funds on a long-term basis. It soon became obvious to the SVMIC Board and the IP/PRC that we shared a common goal, the health and welfare of our physician population. The Board and executive staff of the SVMIC promptly agreed to offer major financial support to the IP/PRC, and has continued to increase their support over the years. Presently, they supply approximately two-thirds of the IP/PRC budget with no strings attached.

The medical director has also served as a major speaker during SVMIC's Loss Prevention Seminars on a regular basis, and has produced a number of filmed vignettes, which have been shown during these seminars. These vignettes have proven to be an excellent educational tool. In short, the IP/PRC is profoundly grateful to the SVMIC for their magnificent support. Were it not for their funding, we could not have achieved our goals.

The IP/PRC's relationship with the Board of Medical Examiners has also been at "arms length." Increasingly, this Board has requested that certain physicians who have appeared before them for a variety of offenses be monitored by the medical director. This additional burden has been borne by the director, but his efforts remain uncompensated.

During the very early years of our program, it became apparent that many of our ill physicians who were about to enter into treatment were financially destitute. This, of course, was not surprising, as the very nature of their chronic illness often led to indebtedness and loss of health insurance. In 1982, we instituted a Loan Fund capitalized primarily by voluntary contributions from our caring members. Over the years, this Fund has grown to an amount in excess of \$400,000 and it has assisted 46 physicians on their road to recovery. The Fund may lend up to \$10,000 to a needy physician who has demonstrated that he is unable to obtain a commercial loan. An interest rate of 10% is charged, with a repayment schedule to begin after the physician has returned to gainful employment. We believe that ultimately the Loan Fund will become self-sustaining, with interest income exceeding losses. Once again, the IP/PRC wishes to express our gratitude to the TMA membership for their financial support, which has made it possible for our physicians in need to obtain treatment which otherwise would not have been affordable.

Annually for the past seven years, the IP/PRC has sponsored a seminar for other organizations in our state concerned with impairment within their professions. Lawyers, nurses, dentists, psychologists, veterinarians, social workers, pharmacists, and others have sent representatives to these meetings, all contributing to a lively and worthwhile afternoon. Common problems and solutions are discussed and goals are outlined. This melding of concerns has proven to be a very worthwhile endeavor and will be continued in the future.

Where Are We Going?

The treatment of chemical dependency and its associated illnesses is a rapidly changing field. Just ten years ago, when this program was in its infancy, therapy was directed solely towards the illness and the afflicted individual. We now recognize that this approach was at best naive and certainly inadequate. Any person who is ill with the disease of chemical dependency will affect many others—family, friends, associates, hospital staff, and patients, to name only a few. I believe we would be derelict in our responsibilities as physicians if we failed to recognize these needs.

During the past three or four years, Dr. Dodd has received many calls from a variety of sources asking for help in managing these "peripheral" concerns. In 1990, Dr. Dodd received 128 calls requiring identification and intervention. Over 50 of these were for drug- or alcohol-related problems, the remainder for disabilities related to stress, depression, uncontrollable anxiety, and similar mental/emotional illnesses. These requests would seem to be appropriate and in accordance with our charge. Dr. Dodd has consistently referred these requests to suitable therapists for proper management.

The very title of the IP/PRC "Impaired Physicians" is not limited to drugs and alcohol. Likewise, our initial charge, reaffirmed by the TMA Board of Trustees in 1988, states that "The program is focused upon, but not limited to, physicians impaired by the disease of chemical dependency, including alcohol and other drug dependencies, or by mental/emotional illness." These explanatory comments are in response to concerns that have been expressed suggesting that we are "getting into other things." In brief the answer is, "Yes, but we have probably always been there and didn't know it." Only recently have we acquired sufficient knowledge to be in a position to focus on the broader field of impairment, and the membership's needs to deal with them in a more appropriate and forward-looking manner. In dealing with these issues, the IP/PRC will follow an exploratory, evolutionary process in keeping with our abilities and the "informed attitudes of the medical profession."

As the IP/PRC program has evolved over the years, the medical director's workload has grown to exceed that which one person can be reasonably expected to accomplish. Currently, there are over 385 physicians recovering from alcohol or drug dependency, as well as approximately 300 physicians who have required intervention for other problems. All of these individuals require monitoring. He has to interact with Caduceus Clubs and RAM teams statewide and address all Board of Trustee meetings, all SVMIC Loss Prevention Seminars and develop new programs for the latter. As an advocate for physicians ready to reenter practice, he regularly appears before the Board of Medical Examiners and SVMIC. Added to all of this is the "routine" of the job-struggling with the onerous but essential task of verifying and confronting impaired physicians. As if this were not enough, he is frequently asked to speak before other professional programs of similar design and assume a leading role in the Federation of State Physicians Health Programs, on the Board of which he serves. He has produced the vignettes for the Loss Prevention Seminars and developed voluminous written material for educational purposes. I have touched on only a part of what he accomplishes during his "routine" day, but it is enough to support what one of our knowledgeable colleagues called him, "The Miracle Worker." We have organized a search committee to seek out and select an associate medical director who will be able to help Dr. Dodd with these tasks, relieve him during vacation times, and be in a position to assume his responsibilities upon his retirement, which we all hope will be in the distant future. The only part of this essential plan that is missing is additional funding. Currently, we are pursuing several avenues in an effort to obtain these funds.

The IP/PRC is now well into its second decade of service. Your program has become one of the premier programs in the nation. Its reputation is a measure of

the generous support of your Board of Trustees, the SVMIC Board, and other caring and enlightened membership. It could not have succeeded without these alliances. Your committee has also been fortunate in having obtained the service of some 20 members during the past 12 years, all of whom have devoted considerable time and knowledge to the program's needs. They are all to be complimented, but I would be remiss in not singling out a few. Dr. William C. Anderson, of Nashville, has been a member since the beginning, and was responsible for all of the confrontation work, as well as follow-up until Dr. Dodd joined us. Parks W. Walker Jr., M.D., of Memphis, and A. Glenn Kennedy, M.D., of Knoxville, both charter members, offered significant help with recovery monitoring in their regions as well as sage advice. Howard Foreman, M.D., of Nashville, also served from the outset, representing the Board of Medical Examiners and ably assisting the IP/PRC in its relationship with this Board until his retirement two years ago. Last, but not least, Ben D. Hall, M.D., of Johnson City, joined the committee early on and for many years accomplished all of the tasks of the medical director in Upper East Tennessee until Dr. Dodd was employed. He has also chaired the long-range planning subcommittee since it was organized over three years ago. The contributions of this valuable subcommittee, under Dr. Hall's direction, have been immeasurable, and have laid the foundation for IP/PRC's future direction and growth. There is one individual who has been seated to the right of the chairman for 12 years, always available, understanding, and knowledgeable, whose contribution has made him the one indispensable member; he is Mr. Don Alexander, associate executive director of the TMA and our staff liaison. The committee owes him a deep debt of gratitude, and we acknowledge it here.

Your committee wishes to express its gratitude to the TMA members for giving it the opportunity to develop and sustain a program whose basic purpose has been physicians helping physicians. For this, we thank you.

Committee Members

Charles B. Thorne, M.D., Chairman, Nashville William C. Anderson, M.D., Nashville Charles S. Hertz Jr., M.D., Jackson Robert W. Booher, M.D., Maryville Daniel J. David, M.D., Johnson City David G. Gerkin, M.D., Knoxville William W. Cloud, M.D., Knoxville Kenneth F. Tullis, M.D., Memphis Parks W. Walker Jr., M.D., Memphis Walter Puckett III, M.D., Chattanooga A. Glenn Kennedy, M.D., Knoxville Ben D. Hall, M.D., Johnson City David T. Dodd, M.D., Medical Director, Murfreesboro Mrs. Gayanne Burns, TMA Auxiliary

Highlights of the TMA Board of Trustees Meeting

January 12-13, 1991

The following is a summary of the major actions taken by the Board of Trustees of the Tennessee Medical Association at its regular first quarter meeting in Nashville, January 12-13, 1991.

TH	F	R	n	Δ	R	D:
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Executive Committee Approved TMA's endorsement of Dr. Charles Allen's candidacy for the AMA Coun-

cil on Medical Education.

Impaired Physician Peer
Review Committee
Approved the TMA Impaired Physician Committee as the Tennessee representative for the Impaired Physician Program of the American College of Surgeons.

Approved in concept the addition of an associate medical director for the Impaired

Physician Program.

Drug Testing StudyAccepted a report on drug testing as called for in Resolution No. 15-90 and agreed to present it to the House of Delegates.

Healthcare Exchange Forum
Regional Meeting

Agreed to donate up to \$4,000 in support of regional meetings planned by the Tennessee Healthcare Exchange Forum.

Appointments

Appointment Committee representing each grand division:

East Tennessee—Drs. Nat E. Hyder Jr., Johnson City, Robert N. Montgomery, Knoxville, William Edward Rowe, Chattanooga. Middle Tennessee—Drs. William B. Harwell Jr., Nashville, Will G. Quarles Jr., Livingston, William J. Pedigo, Clarksville.

West Tennessee—Drs. Charles W. White, Lexington, J. Chris Fleming, Memphis,

Warren A. Alexander, Covington.

Appointment of Standing and special committees Nominated and approved members to serve on each of the standing and special committees of TMA.

Voted to recommend an amendment to TMA Bylaws that would create a position for one physician from the Young Physician Section on standing committees.

Committee Dissolved Voted to dissolve the Drug Education and Evaluation Committee.

TMA-SEF Board of Directors
Appointments

Nominated Drs. Charles E. Allen, Johnson City, Robert L. Chalfant, Nashville, and Patrick J. Murphy, Memphis, to serve three-year terms on the Board of Directors of the TMA-Student Education Fund.

Tennessee Medical Foundation
Board of Directors
Appointments

Appointed Drs. Howard L. Salyer, Nashville, Dennis A. Higdon, Memphis, and Burgin E. Dossett Jr., Johnson City, to serve three-year terms on the Tennessee Medical Foundation Board of Directors.

Appointments

Ap

Reconfirmed the following members of the IMPACT Board of Directors: Drs. David K. Garriott, Kingsport (1st Cong. Dist.), David Barnes, Chattanooga (3rd Cong. Dist.), Virgil H. Crowder Jr., Lawrenceburg (4th Cong. Dist.), Will G. Quarles Jr., Livingston (6th Cong. Dist.), Charles W. White, Lexington (7th Cong. Dist.), and Robert D. Kirkpatrick, Memphis (9th Cong. Dist.).

Voted to nominate Drs. B.J. Smith, Dickson, James C. Hunt, Memphis, and Daniel J. David, Johnson City, for the state's consideration as TMA's representative to the Community Health Agency Advisory Council.

journal of the tennessee medical association

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Pulmonary Blastoma: A 12-Year Follow-Up

N.V. VAIDYANATHAN, M.D.; WILLIAM M. DRALLE, M.D.; and ERROL J. BROWN, M.D.

Introduction

Pulmonary blastoma is a rare primary lung neoplasm with about 90 cases reported in literature. It was first described by Barrett and Barnard in 1945. In 1961 Spencer suggested the term pulmonary blastoma because of his concept that it was analogous to

the origin of Wilm's tumor from renal blastema.¹ Now it is believed to be a mixed epithelial and mesenchymal tumor that recapitulates the pseudoglandular stage of pulmonary organogenesis.^{2,3} The tumor has shown male preponderance and occurs in both children and adults.

The tumor has been treated most commonly by surgery alone, but both radiation and chemotherapy have been employed. Although survival has been reported from a few weeks to 24 years,⁴ several reports indicate metastasis and unpredictable prog-

From the Division of Pulmonary Medicine, Department of Internal Medicine (Drs. Vaidyanathan and Dralle) and the Department of Pathology (Dr. Brown), Veterans Affairs Medical Center, Mountain Home.

Reprint requests to Division of Pulmonary Medicine (111B), Veterans Affairs Medical Center, Mountain Home, TN 37684 (Dr. Dralle).





Figure 1. PA and lateral chest x-rays reveal a soft tissue mass involving the right lower lobe with a dense infiltrate in the right middle lobe. This could be secondary to partial obstruction of the bronchus of the right middle lobe.

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nosis.⁵ We present our experience with a case treated with pneumonectomy that has been followed for over 12 years without recurrence or metastasis. This highlights the complexity of this neoplasm and the need to elucidate its histology and biology.

Case Report

The patient is a 53-year-old white man with intermittent burning, nonradiating pain of the right side of the chest for one year. He admitted to a productive cough with a small amount of yellowish-white sputum for several months. He had a history of hemoptysis and intermittent hoarseness for three days about two months before hospitalization. He had a history of exposure to asbestos for about 18 years, and also had a 30-year history of smoking one pack of cigarettes a day. The past medical history was noncontributory, and the physical examination unremarkable. Chest x-ray showed a mass measuring 5×4-cm in the right lung field (Fig. 1). Pulmonary function tests showed FVC 78% of predicted and FEV₁ 2.59 L (78% of predicted); FEV₁:FVC – 100%. SMA-18 was within normal limits.

Bronchoscopy with biopsy and washings showed a tumor occluding the lumen of the right mainstem bronchus at a point just proximal to the lower lobe bronchus. The entire medial wall to a point 3 mm below the carina was involved to the

extent that the upper and middle lobe bronchial orifices could not be identified. The tumor appeared to be polypoid and protruding into the lumen rather than involving the bronchus circumferentially. Based on the radiographic picture, mediastinotomy or mediastinoscopy was not considered helpful in determining the resectability of the tumor.

Via a right thoracotomy, a large rounded slightly cystic tumor mass was identified occupying the superiomedial aspect of the right lower lobe, extending to the hilum, and measuring about 5 cm in the greatest diameter. It was mobile and apparently not invading the mediastinum or the hilar area. There was no gross invasion of the upper lobe, but the tumor was found occupying such a position in the bronchus intermedius that right pneumonectomy was required for removal of the lesion. There was no gross tumor invasion of the pulmonary hilum or mediastinal or hilar lymph nodes. Inspection of the open right mainstem bronchus on the resected specimen revealed tumor extending to the margin of resection with 1 or 2 mm of normal bronchus present. A more adequate margin could not be obtained due to the proximity of the carina.

The bronchoscopic biopsy specimen consisted entirely of malignant glands with considerable variation in size, shape, and staining reaction. Fragments of tissue showed evidence of mucin production. The bronchial washings showed well-differentiated cells forming glands.

The specimen obtained by pneumonectomy had three distinct microscopic appearances, with the most prominent feature being glandular or papillary structures made up of columnar epithelium (Fig. 2). There were solid epithelial areas reminiscent of carcinoid tumor (Figs. 3 and 4). Between these two



Figure 2. Photomicrograph of the tumor consisting of glandular and tubular structures. In multiple areas the epithelial cells form solid nests without lumens (hematoxylin-eosin, ×200).

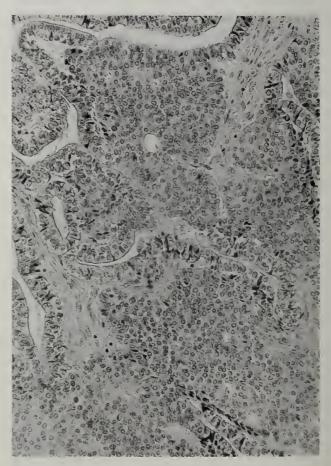


Figure 3. Photomicrograph of the epithelial cells of the tumor forming both solid nests and glandular spaces (hematoxylin-eosin, ×200).



Figure 4. High-power photomicrograph of the epithelial cells of the tumor. Multiple lumen are seen (hematoxylin-eosin, ×400).

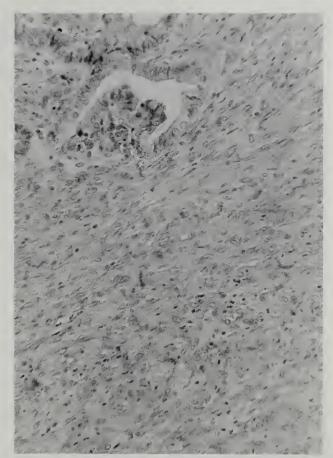


Figure 5. Photomicrograph illustrating the mixed adenomatous and sarcomatous patterns. On the left the spindle-shaped stromal cells have a definite sarcomatous appearance (hematoxylin-eosin, ×200).

types of epithelial patterns there were areas of spindle-shaped stromal cells having a sarcomatous appearance (Fig. 5). A single lymph node contained no malignancy.

Discussion

Pulmonary blastoma is an interesting entity, the histogenesis of which has remained controversial for the 40 years that it has been recognized. It was described as an embryoma by Bernard on a descriptive basis and by Spencer as blastoma because of the resemblance to nephroblastoma and his concept that these tumors arose from primitive pluripotent mesenchyme, the pulmonary blastema. But subsequent electron microscopic studies showed that endodermal buds give rise to airway and alveolar epithelium, making the concept of a simple pluripotent pulmonary blastema untenable. This tumor has been shown to be distinctive, with remarkable light and ultrastructural resemblance to fetal lung at 10 to 16 weeks of gestation.3-6 Intestinal epithelial-type features have also been described by electron microscopy,⁷ the most reliable markers reported being glycocalyceal bodies and microvillous

core rootlets. Other markers such as neuroendocrinetype granules have also been reported.⁷

In our patient, the bronchial biopsy was reported as adenocarcinoma, but subsequently was changed to pulmonary blastoma after evaluation of the entire specimen postoperatively. Pulmonary blastoma is a rare neoplasm that generally arises in the peripheral portion of the lung and demonstrates variable clinical behavior and poor correlation between microscopic appearance⁸ and clinical course.⁴ It has been reported in patients varying from a few months of age into the 80s, with a peak incidence between 40 and 60 years and a predominance in male sex by almost 2:1 to 5:1 by different authors.^{8,9} Symptoms varied from none to cough, hemoptysis, pleuritic chest pain, and shortness of breath. There were no clinical features to distinguish this from other pulmonary neoplasms.8 Commonly employed diagnostic measures such as chest x-ray, sputum cytology, and even bronchoscopy and biopsy were of limited value, as exhibited in our case and as documented by other authors. As in the majority of the reported cases, diagnosis in our case was made only at thoracotomy. Pneumonectomy

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has been the treatment of choice, though lobectomy and wedge resection have also been employed. Although postoperative chemotherapy and radiation therapy have been employed by various centers, 6,10 neither was considered for our patient.

Although the structure of the tumor indicates a malignant behavior, various survival times have been reported, from less than a year to 24 years, with a five-year survival of 15.7%.9 Pulmonary metastasis has been reported.¹¹ The local recurrences are usually well differentiated in relation to the primary tumor, and metastatic lesions are extremely variable, with tubal or gland-like formations in 90% of patients. Our patient has not exhibited any metastasis 12 years after surgery, and is in a stable condition with mild dyspnea on exertion.

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Pneumonia Caused by Corynebacterium Pseudodiphtheriticum

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Introduction

Members of the genus *Corynebacterium* are ubiquitous in the environment and are colonizers of skin and mucous membranes. ^{1,2} *Corynebacterium* may be a commensal of the upper respiratory tract. ³ Pneumonia caused by nondiphtheria *Corynebacterium* is rare ¹ despite increasing reports of other normal throat flora causing respiratory infection. For example, *Branhamella catarrhalis*, ^{4,5} and nontypeable *Hemophilus influenzae* ^{6,7} have been increasingly implicated as respiratory pathogens. We report the case of a 68-year-old man with a permanent tracheostomy who developed pneumonia caused by *C. pseudodiphtheriticum*. This is at least the fourth such case of acute pneumonia caused by this organism.

Case Report

Eight hours after admission, a 68-year-old white man admitted electively for cataract surgery was found to have a productive cough and a temperature of 102°F. His surgery was canceled, and he was transferred to the medical service, where he gave a one-week history of increasing cough productive of yellowish-green sputum. He had several episodes of shaking chills over the previous two days, as well as episodes of nausea with vomiting. He denied pleuritic chest pain or dyspnea. In addition to cataracts, the patient's past medical history was significant for osteoarthritis and pulmonary scarring with pleural and hilar calcification. Laryngectomy had been done one year earlier for laryngeal carcinoma. The patient had a 90 pack/year history of cigarette smoking, and had spent 15 years working in a coal mine.

On physical examination, he was thin and in mild respiratory distress; blood pressure was 99/65 mm Hg, temperature 102.3°F, and pulse 90/min. His mouth was edentulous. His throat showed no inflammation, and there was no cervical lymphadenopathy. His tracheostomy site was without signs of inflammation; it was coated with thick greenish sputum. Chest examination showed decreased excursion on the left posteriorly, and there were coarse crackles over the right anterior chest, associated with bronchial breath sounds. His abdomen was soft and nontender, with active bowel sounds. The liver and spleen were nonpalpable, and neurologic examination showed no localizing findings.

Laboratory studies showed a hematocrit of 39.3%, hemoglobin 13.9 gm/dl, and WBC count 10,200/cu mm. Arterial blood gas analysis revealed a Po₂ of 66 mm Hg, Pco₂ 37 mm Hg, pH 7.451, and O₂ saturation 92.7% on room air. Chest x-ray showed focal opacification containing air bronchograms in the infrahilar region on the right, as well as in the medial parahilar lung field on the left, elevated hemidiaphragm on the left, and multiple calcified pleural plaques.

A sputum gram stain showed numerous polymorphonuclear leukocytes and gram-positive rods (Fig. 1). *C. pseudodiphtheriticum* was isolated in pure culture. The organism was nitrite, urea, and indole positive. Minimal inhibitory concentrations were as follows: ampicillin .12 µg/ml, erythromycin .25



Figure 1. Gram-positive rods and polymorphonuclear leukocytes on gram stained smear of expectorated sputum (original magnification, \times 1.000).

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CORYNEBACTERIAL PNEUMONIA/Williams

μg/ml, gentamicin .25 μg/ml, vancomycin .5 μg/ml, oxacillin .25 μg/ml. Blood cultures and urine culture were negative.

The patient was given vancomycin and aztreonam, to which he responded rapidly, with cessation of cough and sputum production. He became afebrile on the third day of antibiotic therapy. Aztreonam was discontinued on day two and vancomycin on day nine, and erythromycin 500 mg orally four times a day was given for the completion of a two-week course of therapy. By day seven the chest x-ray had cleared.

Discussion

Nondiphtheria Corynebacterium rarely has been reported to cause pneumonia. C. equi, recently reclassified to the genus Rhodococcus, has been responsible for an increasing number of cases of pneumonia, cavitary disease, and pulmonary nodules, 8,9 particularly in patients with acquired immunodeficiency syndrome (AIDS).⁹ Pneumonia has been caused by group JK Corynebacteria, 10,11 usually in the immunosuppressed patient with malignancy. Two patients with C. xerosis³ bacteremia were colonized with this organism in their respiratory tract. C. pseudotuberculosis¹² caused pneumonia in a 28-year-old veterinary student, and C. ulcerans pneumonia has been reported in an elderly patient with bronchogenic carcinoma.¹³

A previous case of C. pseudodiphtheriticum¹⁴ infection occurred in a young man with systemic lupus erythematosus who had been on prednisone and cyclophosphamide; he may have had concomitant cytomegalovirus infection. Diagnosis of C. pseudodiphtheriticum was made by growth in pure culture from bronchial washings. Pneumonia caused by C. pseudodiphtheriticum also occurred in a previously healthy trauma case. 15 The organism was isolated by endotracheal aspirate, and humoral antibody response

was documented by an enzyme-linked immunosorbent assay. Andavolu et al¹⁶ have reported C. pseudodiphtheriticum causing a lung abscess in a patient with AIDS-related complex, a clinical picture more commonly described with Rhodococcus equi.

C. pseudodiphtheriticum may be a cause of pneumonia even in patients who are not seriously immunocompromised. Sputum gram stains of good quality showing small gram-positive rods should suggest nondiphtheria Corynebacterium as a possible cause of pneumonia.

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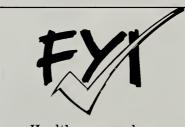
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Health care workers number 7.5 million more than 6% of the total private labor force in America.

Source: Bureau of Labor Statistics

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Endoscopic Gastrointestinal Laser Therapy

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Introduction

The use of laser technology is well established in many fields of medicine. Recent developments in fiberoptics have expanded its applications to gastro-intestinal endoscopy. Since its first endoscopic application in 1975¹ for control of upper GI bleeding, laser therapy has been widely used to treat bleeding or obstructing lesions of the GI tract. While the application of laser and endoscopic technology is mechanically feasible, its exact place in the clinical armamentarium is still being defined as the lasers become more widely distributed throughout the United States.

This report presents our experience with Nd:YAG laser at the East Tennessee State University Affiliated Hospitals in Johnson City, from October 1985 to June 1990. This study took place in a unique period for this center, because it includes the initial use of endoscopic laser technique, the learning curves associated with its application, and a time when its use became routine.

Materials and Methods

We made a retrospective review of hospital charts and outpatient records of the 76 patients treated with Nd:YAG laser during the last five years, extracting from each case (1) the type of laser treatment, (2) diagnosis, (3) indication for treatment, (4) type of anesthesia, (5) postoperative course, (6) success of procedure, and (7) morbidity and survival.

Results

Of the 76 patients who had laser therapy of GI lesions, 30 were treated for tumors. Ten had obstructing esophageal carcinomas, two had colon carcinomas, and another two had large rectal carcinomas.

Sixteen patients were treated for colon polyps or rectal villous adenomas (Table 1). Six of the patients with rectal villous adenomas were very poor surgical risks, including one 99-year-old man. Twenty-eight of the 30 patients had successful treatment of their GI tumors. We were unsuccessful in maintaining an open channel in two patients who had large esophageal carcinomas. Successful laser treatment definitely improved the quality of life in this group of patients, with the vast majority of patients eating and having bowel movements up to the time of death.

GI bleeding was successfully treated in 22 of 26 patients. Twenty patients had gastric or duodenal ulcer bleeding. The other six had bleeding from the colon—two of them post-polypectomy, and four from AV malformations. The four failures occurred in large duodenal and gastric ulcer hemorrhages that required emergency laparotomy.

The highest failure rate occurred in the treatment of benign GI and anastomotic strictures. There were ten strictures in all—six at the esophagogastric anastomoses and four at the gastroduodenal anastomoses. Only four of the ten patients were successfully treated with the laser. Ten patients underwent hemorrhoidectomies with the laser, all having done quite well. The overall success rate for the treatment of GI lesions was 84% (64/76). There were 124 treatments performed on these 76 patients (Table 2).

Discussion

Since its first endoscopic application in 1975 for the control of upper GI bleeding, laser energy has been widely used to treat bleeding or obstructing lesions of the GI tract.²⁻¹³ All types of bleeding in the GI tract can be stopped. Smaller lesions will be permanently sealed, although a high proportion of esophageal varices will rebleed later. Emergency surgery can be avoided, allowing an elective surgical procedure on a stabilized patient. This has been demonstrated to decrease the high mortality rates as-

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ENDOSCOPIC GI LASER THERAPY/Katras

sociated with emergency surgery on acutely bleeding patients.

The laser can be used in endoscopic treatment of bleeding from peptic ulcers. Hemostasis may be achieved by using the laser fiber in either a contact or noncontact fashion. In cases of active bleeding at the time of endoscopy, situated in an area that is difficult to access for contact or heater probes, the laser offers the advantage of being able to coagulate without contact. Contact probes can be used to coagulate GI bleeders with at least 75% less power, with the advantage of mechanical pressure to coat the vessel walls as it is heated. Angiomata of the GI tract also respond well to the laser, but the laser is of less value for the more diffuse lesions, such as hemorrhagic esophagitis, gastritis, or duodenitis.

Recanalization of advanced obstructive tumors is an excellent use for Nd:YAG laser for palliation. It can provide relief of symptoms, particularly for the dysphasia associated with advanced esophageal

TABLE 1

INDICATIONS FOR LASER THERAPY IN 76 PATIENTS (124 TREATMENTS)

- 30 Tumor
- 26 Bleeding
- 10 Anastomotic stricture
- 10 Hemorrhoids

TABLE 2
LESIONS TREATED WITH LASER AND THEIR SITES

Tumor	Bleeding	Benign Stricture
10	0	6
0	8	4
0	12	0
6	6	0
14	0	0
	10 0 0 6	10 0 0 8 0 12 6 6

lesions and other tumors that are unsuitable for other forms of treatment. Obstructions may be coagulated and debrided without contact. Obstructions may also be opened by using contact vaporizing probes, creating a new lumen through which the patient can swallow, dramatically improving the quality and in some cases the length of life. Otherwise, patients would be destined to die from extensive tumor burden.

Hemorrhoids have also been treated successfully with Nd:YAG lasers, which can be used also for external hemorrhoids and skin tags as well as for coagulating feeders to the internal veins.

In conclusion, endoscopy of the GI tract using the Nd:YAG laser is a safe, viable, and increasingly popular alternative to surgical intervention in the elderly, high-risk, or incurable patient. In our experience, the Nd:YAG laser was effective in the treatment of GI bleeding of both benign and malignant causes and obstruction due to tumor bulk. In our series, palliation with the laser gave better quality of life in the majority of patients. There was very low morbidity associated with laser therapy, and no mortality. The procedure can often be performed without anesthesia on an outpatient basis.

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Retroperitoneal Hematoma

RICHARD S. MILLER, M.D. and JOHN A. MORRIS JR., M.D.

Case Report

The patient is a 31-year-old white man who was an unbelted driver in a two-vehicle motor vehicle accident. There was history of loss of consciousness at the scene. He was taken to an outside hospital, resuscitated with 7 liters of crystalloid and 1 unit of packed cells, and transported by air hemodynamically stable.

On physical examination he was well-developed and nourished and in moderate distress. There was a large laceration over the left eyebrow. He had bilateral periorbital ecchymosis and a stepoff of the left zygoma, and the midface was unstable. The abdomen was tender to palpation, the pelvis was stable, and hematuria was present. Rectal tone was normal. There was an open fracture of the left elbow, and a grossly deformed right leg with a large laceration of the knee. The patient followed simple commands and had no focal neurologic deficit.

On initial x-ray evaluation the chest film was normal without evidence of pneumothorax or widening in the mediastinum. Pelvis film revealed a right inferior ramus fracture. CT scan of the head showed a right parietal contusion with a basilar skull fracture on the left and an opacified maxillary sinus bilaterally. Free intraperitoneal fluid was detected on abdominal CT scan. Long bone films showed a fracture of the tibia and fibula on the right as well as a right patella fracture.

Exploratory laparotomy disclosed a large central retroperitoneal hematoma extending from the renal vessels to the bifurcation of the aorta. A 15-cm segment of the transverse colon from the hepatic flexure to the midtransverse colon was severely contused and ischemic. There was a grade 1 liver laceration, which was not bleeding at the time of operation. During the course of the exploration, when the central hematoma was noted to be expanding, the retroperitoneum over the proximal infrarenal aorta was opened, and using a combination of blunt and sharp dissection, the infrarenal aorta was mobilized to permit cross clamping. The hematoma began to leak blood freely at this juncture, and was controlled with manual pressure. Once distal control had been obtained, the hematoma was entered and the bleeding was localized to the inferior mesenteric artery, which had been avulsed from the aorta just distal to its origin. The origin of the inferior mesenteric artery was oversewn using 5-0 Proline, the distal inferior mesenteric artery was ligated, and a right hemicolectomy with primary ileocolic anastomosis was done. A needle catheter jejunostomy was placed approximately 20 cm distal to the ligament of Treitz.

After completion of the general surgery, the orthopedic surgeons irrigated and debrided the open fractures. The patient received a total of 9 units of packed cells, 1,000 cc of crystalloid, and 14 units of fresh frozen plasma.

On the fifth postoperative day the patient was returned to the operating room for open reduction and internal fixation of the tibial and elbow fracture. The next day he was again taken to the operating room for open reduction and internal fixation of his midface fractures, which included fractures of the left zygoma, maxilla, and mandible. A tracheostomy was done at that time to assure patency of the airway, and he was discharged on the 21st hospital day.

Discussion

This patient had the unusual operative finding of a midline large retroperitoneal hematoma, which was expanding. The key to diagnosing retroperitoneal injuries is a high index of suspicion, with an organized diagnostic approach. The hallmark of retroperitoneal injury both radiographically and in the operating room is the retroperitoneal hematoma. Ideally, it is diagnosed preoperatively, but more commonly it is discovered during laparotomy.

Preoperative Diagnosis of Retroperitoneal Hematoma. The preoperative diagnosis of retroperitoneal hematoma is suspected on physical examination and confirmed by radiography. Patients with penetrating trauma to the torso who are hemodynamically unstable or who have peritoneal signs require immediate laparotomy. Patients with penetrating trauma to the back or flank who are hemodynamically stable, with a blood pressure above 90, require an intravenous pyelogram to rule out renal injury. Two percent of patients with gunshot wounds to the back will not have hematuria even though they have a transection of the ureter.¹

The preoperative evaluation and diagnosis of retroperitoneal hematoma in patients with blunt trauma is more difficult. All patients with blunt torso trauma require AP chest and pelvis films early during their resuscitation. The AP pelvis film is especially helpful in patients with hemodynamic instability. Isolated fractures to the pelvic rami rarely have hemodynamic implications. Three fractures, however, defined on AP pelvis film, are associated with massive retroperitoneal bleeding; these are the straddle fracture (defined as a fracture of all four pubic rami); the open book fracture (wherein there is a diastasis of the pubic symphysis of greater than 2.5 cm); and the vertical shear fracture, wherein there are fractures of both the anterior and

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posterior elements of the pelvis with displacement of the entire hemipelvis by 1 cm or more.²

If any of these injuries are present, the decision to take the patient to the operating room is complicated by the potential of major retroperitoneal hemorrhage. There are two commonly used diagnostic tests for evaluating the need for laparotomy in the blunt trauma patient: diagnostic peritoneal lavage and abdominal CT scan. These two tests are complimentary, and not mutually exclusive. Though diagnostic peritoneal lavage provides good information about bleeding in the abdomen itself, it provides no information about injury to the retroperitoneum.

The CT scan provides good preoperative information on retroperitoneal injuries, including those to the pancreas and the kidney, and the size of the retroperitoneal hematoma. Patients with large pelvic retroperitoneal hematomas, but no evidence of visceral injury or free intraperitoneal fluid, usually do not require laparotomy. Patients with a retroperitoneal hematoma and free fluid require laparotomy, but the initial surgical incision should be supraumbilical to avoid opening the space of Retzius and releasing retroperitoneal tamponade.

Operative Management of Retroperitoneal Hematoma. Conceptually the management of retroperitoneal hematomas in the operating room is based on the anatomic location of the hematoma and the mechanism of injury (blunt or penetrating). The three zones of retroperitoneal hematoma are outlined in Fig. 1.3 Zone 1 is the centromedial portion of the retroperitoneum, and includes two viscera, the duodenum and pancreas, as well as all major abdominal vasculature. Zone 2 is the lateral area and incorporates the kidney and retroperitoneal portion of the colon and its mesentery. Zone 3 is defined as the pelvic portion of the retroperitoneum, but it also includes the anterior extension of the retroperitoneum and the space of Retzius, which inserts at the level of the umbilicus.⁴

Zone 1 Injuries. All centromedial hematomas require exploration. The most common zone 1 hematomas involve the pancreas and the duodenum. Inspection of this area may reveal crepitus or visible bile staining under the hematoma. Simple injuries to the duodenum are treated with closure and drainage; more complex injuries are treated with either closure or resection accompanied by pyloric exclusion and drainage. Pancreatico-duodenectomy is seldom required.⁵

Zone 1 hematomas resulting from blunt injury to the abdominal vasculature, although present in this case report, are exceedingly rare. Zone 1 hematomas resulting from penetrating injury to the abdominal vasculature are dramatic and associated with a high mortality rate. These patients frequently arrive in the emergency room moribund and require immediate celiotomy in order to survive. Midline retroperitoneal hematomas are divided into two components: supramesocolic and inframesocolic.¹

The initial control of the supramesocolic retro-

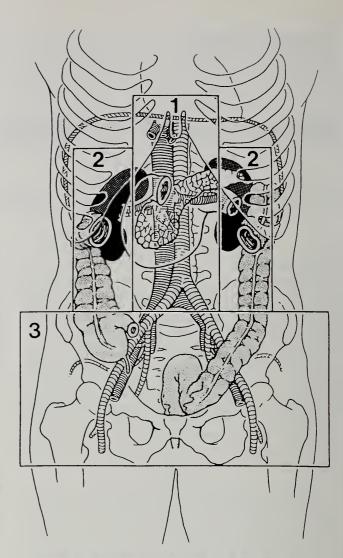


Figure 1. The three anatomical zones of the retroperitoneum.

peritoneal hematoma requires exposure and clamping of the suprarenal aorta. This may be accomplished using either operating room thoracotomy or mobilization of the left colon and left upper quadrant viscera to the midline. The operating room thoracotomy is by far the simplest method of gaining control of this very difficult anatomic area. Once proximal control is obtained the left-sided viscera can then be rotated to the midline to provide exposure to the lesion.⁶

Inframesocolic retroperitoneal hematomas are more common, and involve injury either to the infrarenal aorta or to the inferior vena cava. The aorta may be approached either from the midline or by reflection of the right colon to the midline providing exposure first to the vena cava and then to the aorta.¹

Zone 2 Injuries. The presence of a zone 2 retroperitoneal hematoma suggests injury to the kidney or colon. Kidney injuries are often associated with hematuria (greater than 30 RBC/HPF) and are best evaluated preoperatively by CT scan. CT scan will ac-

curately define the anatomy of these lesions and decrease both the laparotomy rate and the nephrectomy rate. Approximately 95% of blunt injuries to the kidney involve isolated perirenal hematomas that can be managed nonoperatively. Radiographic indications for renal exploration include extensive extravasation, nonperfusion of 20% or more of a kidney, and major vascular injury.7 Once a decision is made for renal exploration, vascular control of the renal pedicle must be performed before opening Gerota's fascia.

Zone 3 Injuries. Zone 3 hematomas are the most common retroperitoneal injuries associated with blunt trauma. The diagnosis of massive retroperitoneal hemorrhage is considered if the patient has one of three major pelvic fractures: (1) diastasis of the symphysis pubis greater than 2.5 cm, (2) straddle fractures (bilateral superior and inferior ramus fractures), or (3) vertical shear fracture (fracture with displacement of one hemipelvis by 1 cm or more).2

Patients who have any of these pelvic fractures and hemodynamic instability may be bleeding either into the abdomen or the retroperitoneum or both. Intra-abdominal bleeding is diagnosed by diagnostic peritoneal lavage. If there is gross blood within the abdomen on diagnostic peritoneal lavage, and the patient is hemodynamically unstable, laparotomy is performed. If the patient is unstable and diagnostic peritoneal lavage is negative, then treatment entails the placement of an external fixator or arteriography with transcatheter embolization of absorbable gel or coils if an arterial bleeding source is identified.1,8

Penetrating injuries to the pelvis that have large retroperitoneal hematomas are relatively rare and the mortality is exceedingly high. These patients all require immediate laparotomy, control of the infrarenal abdominal aorta and vena cava, distal control of the femoral vessels at the groin and then opening of the retroperitoneum. In the best of hands these injuries carry a 50% mortality rate.1,9 In summary, most retroperitoneal hematomas are discovered at the time of laparotomy. Zone 1 hematomas require exploration; most zone 2 and zone 3 hematomas can be observed, while zone 3 hematomas associated with penetrating trauma require exploration.

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Dosage and Administration: Experimental dosage reported in treatment of erectile impotence. 1,3,4 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.3

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A Case of Secondary Hypertension

Case Report

A 33-year-old man was admitted to Vanderbilt Hospital for

evaluation of hypertension and hypokalemia.

The patient had a four-year history of hypertension. Multiple antihypertensive medications including clonidine, verapamil, and hydrochlorothiazide had been prescribed, but his blood pressure remained in the 150/100 to 210/120 mm Hg range. Intermittent episodes of profound muscle weakness and lethargy had occurred in the past two years. On one occasion, he lost consciousness and had severe hypokalemia documented in the emergency room. He was referred to Vanderbilt Hospital for further evaluation. His medications were potassium 72 mEq orally twice a day, captopril 50 mg orally twice a day, and sustained-release diltiazem 120 mg orally twice a day.

Physical examination revealed a healthy, well-developed man with a supine blood pressure of 168/108 mm Hg. The remainder of the physical examination was negative. Laboratory examination revealed sodium 146 mEq/L, potassium 3.4 mEq/L, chloride 103 mEq/L, and bicarbonate 30 mEq/L.

Primary hyperaldosteronism was suspected. A baseline aldosterone level was 39 ng/dl (normal 3 to 35) and a baseline renin level was <0.1 ng/ml/hr (normal 0.7 to 3.3). Two hours after 2 liters of saline were infused intravenously, the aldosterone level was 37 ng/dl and the renin level was <0.1 ng/ml/hr. A CT scan showed a 2×2-cm mass near the left kidney. The adrenal veins were catheterized and serum samples were obtained. The right adrenal vein aldosterone level was <25 ng/dl. The left adrenal vein aldosterone level was >6,000 ng/dl, confirming the diagnosis of primary hyperaldosteronism due to a unilateral adenoma. Surgical excision of the adenoma is planned.

Discussion

Primary aldosteronism is a potentially curable form of hypertension. As primary aldosteronism is present in less than 1% of the hypertensive population, an understanding of its pathophysiology and clinical characteristics is essential for its prompt recognition and treatment.

Aldosterone, a potent sodium-retaining mineralocorticoid hormone, is produced by the adrenal cortex. Aldosterone affects sodium transport in the kidney. Potassium or hydrogen ion is secreted into the tubular fluid and sodium is resorbed.1 Potassium and angiotensin II are important physiologic regulators of adrenal aldosterone secretion.2

Aldosterone excess leads to volume expansion and hypokalemia. Headache and hypertension are common clinical consequences of volume expansion. While the hypertension may be severe, retinopathy and renal impairment are usually absent, and this may be a clue to the diagnosis. Volume expansion also decreases the renal tubular resorption of magnesium, leading to hypomagnesemia.1 The manifestations of hypokalemia vary and include fatigue, muscle cramps, weakness or paralysis, and carpal pedal spasm. Prolonged potassium deficiency impairs the concentrating function of the kidney, leading to polyuria and nocturia.1

In screening for primary hyperaldosteronism, most patients have the triad of low serum potassium, low serum renin, and high serum aldosterone levels, although "normokalemic" primary aldosteronism exists. While the majority of patients have serum potassium levels <3.5 mEq/L, up to 20% may have a level between 3.5 mEq/L and 4.0 mEq/L.1 In addition, a subpopulation of patients with essential hypertension have low serum renin values. For this reason, the diagnosis should be confirmed by a saline suppression test. In the absence of antihypertensive medication, the infusion of saline will suppress aldosterone levels in patients with essential hypertension. As this patient demonstrates, aldosterone is not suppressed in patients with primary aldosteronism.

This patient had a solitary adrenal adenoma, or Conn's syndrome, which is the major cause of primary aldosteronism. Surgical removal of the adenoma results in cure or improvement of hypertension and associated abnormalities in 80% of patients.^{2,3} Successful longterm medical management of adenomas has also been reported.3 A subgroup of patients with primary aldosteronism has bilateral adrenal hyperplasia, which requires medical therapy. Aldosterone antagonists such as spironolactone are the most commonly used agents.³ CT scan is the method of choice for differentiating adenoma from hyperplasia. Bilateral simultaneous adrenal vein sampling for plasma aldosterone and cortisol ratio may confirm the presence of a suspected adenoma or identify small adenomas not shown by CT scan.2 Adrenal carcinoma and ectopic neoplastic production of aldosterone or ACTH are rare causes of hyperaldosteronism.^{1,2}

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Presented by Kathleen Maletic Neuzil, M.D., Hugh J. Morgan chief medical resident, Vanderbilt University Hospital, Nashville.

A Case of Rhabdomyolysis

Case Report

A 20-year-old man was transported to Nashville General Hospital from the Metro jail complaining of three days of increasing pain in both thighs and his lower back. He stated that his urine had been dark brown for the previous 12 hours. He denied recent trauma to his back or legs. There was no history of alcohol or drug use, and no recent febrile illness. One day before the onset of symptoms he had performed 100 "squats," a form of exercise that was new to him. He was admitted to the hospital.

Physical examination was negative except for very tender and mildly swollen thighs and pain on movement of both lower extremities.

Laboratory examination revealed a normal CBC and normal coagulation studies. Urine drug screen was negative. Ethanol was not present in the serum. SMA-6 was normal with potassium 4.9 mEq/L (normal 3.5 to 5.3) and creatine 1.0 mg/dl (normal 0.5 to 1.4). Serum calcium was normal at 9.0 mg/dl and phosphorus was slightly increased at 5.5 mg/dl (normal 2.5 to 4.9). Other values included an LDH of 2,027 IU/L (normal 91 to 180), SGOT 1,317 IU/L (normal 10 to 42), total bilirubin 0.8 mg/dl (normal 0.2 to 1.0), uric acid 4.5 mg/dl (normal 2.3 to 7.5), and creatine phosphokinase (CPK) 128,960 IU/L (normal 22 to 269). Urine was dark yellow and dipstick positive for protein and blood. No red blood cells were seen on microscopic examination. Urine for myoglobin was negative.

The diagnosis was rhabdomyolysis. The patient was vigorously hydrated with intravenous normal saline to maintain high urine output and treated with sodium bicarbonate to maintain urine pH >7.5. His serum CPK peaked at 131,160 IU/L on the day of admission and decreased over the next seven days to 5,170 IU/L. Electrolytes and creatinine remained normal throughout his hospitalization. He was discharged on the eighth hospital day.

Discussion

Rhabdomyolysis is the clinical and laboratory syndrome resulting from skeletal muscle injury that alters the cell membrane sufficiently to allow escape of cellular contents into the extracellular fluid. The typical clinical presentation includes muscle pain, swelling, weakness, and dark brown urine.

Presented by James M. Heery, M.D., chief medical resident, Metropolitan Nashville General Hospital.

The diagnosis is confirmed by laboratory studies measuring the plasma concentration of cellular contents released from damaged muscle. These include enzymes (CPK, LDH, SGOT, aldolase), myoglobin, and electrolytes (K⁺, PO₄). CPK is believed to be the most sensitive marker. Myoglobin is not always demonstrated in the serum or the urine as it is cleared quickly by renal excretion and metabolism to bilirubin. Myoglobin has a half-life of one to three hours in the circulation.

The causes of rhabdomyolysis are numerous. Gabow et al¹ in a 1982 review article list alcohol abuse as the most common etiology in their cohort, followed by compression injury and seizures. Other studies list strenuous physical activity/exercise, drug ingestion, infections, and immunologic disorders as prominent etiologic events.² A recent report discusses rhabdomyolysis resulting from physical fitness testing of police and fire department recruits in New York and Massachusetts.³

An important complication of rhabdomyolysis is acute renal failure (ARF). The frequency of ARF in rhabdomyolysis has been estimated to be as high as 33%,¹ although more recent studies show an association of 10% to 20%.³⁴. The mechanism of renal injury is unclear. Dehydration, hypotension, acidosis, and concurrent illness (sepsis) have been identified as risk factors for ARF in patients with rhabdomyolysis.¹ There is debate as to whether serum CPK levels correlate with ARF.¹⁴.

Treatment is mainly supportive and aimed at maintaining high urine output while metabolic abnormalities are treated. Systemic alkalization is controversial.² Dialysis for oliguric renal failure and fasciotomy for acute compartment syndrome should be considered when appropriate.

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AIDS-Related Resources for the Physician and the Patient

VICTORIA L. HARRIS, Ed.D. and KERRY W. GATELEY, M.D., MPH

The successful management of a person with HIV/AIDS requires the use of a combination of diverse resources by both the physician and the patient. As the number of AIDS cases increases, physicians will continually be called upon to be clinician, educator, social worker, and counselor. Since physicians cannot be all things to all patients, they recognize the need of the HIV-infected patient for additional services. Physicians need such resources as education and training programs, brochures and other patient handouts, and library sources of information (journals, books, on-line databases, etc.). This article identifies key AIDS-related resources and services for physicians, their staff, and persons with AIDS (PWAs).

Counseling and Testing Services

Free anonymous or confidential HIV antibody testing and counseling services are offered by the Tennessee Department of Health and Environment (TDHE). Tennessee has 55 HIV testing sites. All sites provide pretest and posttest counseling for individuals who wish to be tested for HIV. Individuals who wish to be tested should call the preferred testing site and schedule an appointment. The TDHE AIDS Program Hotline can give you site locations and contact persons. The number is 1-800-525-2437.

Community-Based Organizations

Tennessee currently has nine community-based organizations (CBOs) located in Memphis, Nashville, Knoxville, Chattanooga, Clarksville, and the Tri-Cities area. Professional social workers are available to provide individual counseling and case management to those who have tested HIV-positive or have been diagnosed as having AIDS. The CBOs also provide client support groups facilitated by professional psychotherapists, as well as buddy programs that match trained volunteers with PWAs needing assistance in meeting

From the AIDS Program, Tennessee Department of Health and Environment (Dr. Gateley) and the East Central AIDS Education and Training Center, Meharry Medical College (Dr. Harris), Nashville.

life's challenges. Other client services available are nutritional services (food distribution and nutrition information), social services referral information, patient advocacy, referral to AIDS-sensitive professionals, and emergency assistance. Please call the TDHE AIDS Program Hotline (1-800-525-2437) for more information on the CBOs in your area.

Health Services

The availability of *health services* for persons with HIV infection or AIDS varies from county to county. For the most current information on specialized medical services, call your local hospital, health department, or medical society.

Tennessee has many Medicare/Medicaid certified home health agencies that provide skilled nursing care, physical and occupational therapy, medical social work, speech therapy, and home health aides. Home health agencies can provide both intermittent and private duty care. A physician may recommend a home health agency or the patient may request one. See the Yellow Pages for a complete listing of agencies in your area.

There are 30 identified *hospices* in Tennessee, most of which have a multidisciplinary staff that provides services and support to terminally ill individuals. For example, *Alive Hospice*, a nonprofit organization situated in Nashville, offers home health care for patients and families in situations in which the life expectancy is relatively short. Service is provided by a team of physicians, nurses, social workers, clergy, and volunteers. Alive Hospice, (615) 327-1085, can be contacted for information about similar programs in the state.

Legal Services

The American Civil Liberties Union of Tennessee (ACLU) works to protect the Bill of Rights and defend citizens whose constitutional rights have been violated. Services for people affected by HIV include lobbying, public education, and litigation. They can be contacted at (615) 256-7028.

The Lambda Legal Defense and Education Fund, Inc. was founded in 1973 to advance the rights of

homosexuals and to educate the public about discrimination against homosexual men and lesbians. In recent years, Lambda has also devoted considerable attention to the civil rights issues arising from AIDS, filing and winning the very first case in the nation alleging discrimination related to AIDS. Lambda is located in New York (1-212-995-8585) and is involved in legal cases across the nation. The AIDS Legal Guide and Living With AIDS: A guide to the Legal Problems of People With AIDS are two publications that can be purchased directly from Lambda.

Education/Information

The American Red Cross has trained professionals who offer AIDS education in the schools and the community. In addition, the Red Cross has produced a number of videotapes and pamphlets on AIDS that are available to the public; check with your local chapter.

The East Central AIDS Education and Training Center is part of a four-state regional project committed to education and training of health care professionals relevant to prevention and care of persons affected by HIV/AIDS. Programs and services include education and training sessions adapted to specific target audiences and conducted by a variety of health professionals; information and referral resources such as books, articles, journals, brochures, videotapes, slides, and training manuals; and development of materials including a community resource guide, a nutrition booklet, and a videotape for physicians. For more information call (615) 327-6834.

The National AIDS Information Clearinghouse (1-800-458-5231) is a free service of the U.S. Department of Health and Human Services, Public Health Ser-

vice, Centers for Disease Control. It is the only nationally centralized source for comprehensive information about HIV/AIDS programs, services, and materials. This resource serves health professionals as well as the public.

For a variety of educational information, call Tennessee's toll free *AIDS Program Hotline* (1-800-525-2437). This hotline is operated by the TDHE AIDS Program from 8:00 AM to 4:30 PM, Monday through Friday.

The TDHE AIDS Program also offers the *HIV Drug Reimbursement Program* (formerly the AZT Program). For a patient to be eligible for the HDR Program, a physician must verify that the patient meets the medical criteria established by the U.S. Food and Drug Administration to receive these drugs. The physician also must be willing to follow the patient for adverse effects throughout the patient's program. For recipient criteria call the AIDS Program Hotline listed above or (615) 741-7500.

Project Inform (1-800-822-7422) in San Francisco provides information for people to make informed choices about current and new treatment options.

The NIAID AIDS Clinical Trials Information Service is a central resource providing current information on federally and privately sponsored clinical trials for AIDS patients and others infected with HIV. AIDS clinical trials evaluate experimental drugs and other forms of therapy for adults and children at all stages of HIV infection. Callers can receive this information immediately over the phone by calling 1-800-TRIALS-A. On request, they may also obtain a free printout of a customized search of the clinical trials database. This information can also be accessed directly by subscribers through two on-line databases (AIDSTRIAL and AIDSDRUGS), available through the National Library of Medicine.

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How To Shoot Yourself in the Foot

J. KELLEY AVERY, M.D.

Case Report

The patient is a 20-month-old boy who was playing at home with his parents at about 9:30 PM on Oct. 8. He fell while playing, causing pain in his right leg. It seemed to the parents that he fell on a small plastic toy, a GI Joe. The child cried a lot after the fall and the parents held him until his crying subsided and then put him directly to bed. The little boy cried out several times during the night, and the following morning whenever his parents attempted to pick him up, he screamed, obviously in pain.

The parents took the child to the emergency room (ER) of their community hospital at about 6:00 AM Oct. 9. It was apparent in the ER that this little boy was complaining with any movement of his right leg. An x-ray of the leg revealed a spiral fracture of the right femur at the junction of its lower and middle thirds; it was in very good position. The right leg was splinted and the patient was admitted to the hospital for casting under general anesthesia.

The orthopedic surgeon first saw the little boy at 10:00 AM in the operating room after having talked to the parents. A hip spica cast was applied on the right and the post-casting films showed the fracture to be in good position.

In the recovery room, the baby cried a lot, although seeming to react normally. No neurologic or vascular checks were recorded in the recovery room. The surgeon visited the patient on two occasions while still in the outpatient surgery area, and neurologic and vascular checks were recorded by the physician to be normal on both visits.

After discharge from the recovery room, again neurologic and vascular checks were done by the physician and recorded as normal. The baby was crying perhaps more than the nurses expected. They had called the physician on two occasions and secured orders for sedation. X-rays of the femur were reported as showing indentation of the soft tissues of the thigh, but the fracture remained in excellent position. The patient was discharged a little before 7:00 pm on Oct. 10 and told to return to see the orthopedic surgeon in a week. By 7:15 pm the patient was back in the ER crying with pain. The ER note said "circ OK." The father reported that his son seemed to have lost "feeling" in his toes. At 10:00 pm the child was still crying constantly. The cast was bi-valved. The note by the surgeon recorded "sensory and motor loss below the knew."

The orthopedic surgeon consulted a colleague in a nearby medical center who confirmed the motor and sensory loss and suggested the possibility of a peroneal nerve injury. It was further suggested that after healing of the fracture occurred the child be given physical therapy in the rehabilitation department of the children's hospital.

The fracture healed without further incident and when the cast was removed some four months after injury, physical therapy was begun and continued for three years. By that time there was no evidence of residual neurologic damage.

A lawsuit was filed charging the orthopedic surgeon with negligent treatment. The contention was that the casting had been done improperly, causing "indentation of the soft tissues of the thigh" producing the nerve injury, and because of this negligence, the little boy had suffered needlessly for many hours and had required months of expensive therapy.

Loss Prevention Comments

A thorough investigation of this case revealed several facts that essentially allowed the surgeon no defense. It was noted that there was no careful documentation of the patient's neurologic status preoperatively, thus ruling out the logical contention that the nerve injury might well have been the result of the injury sustained at home.

The child's chart had been completed some three weeks after he was discharged from the hospital, and the nerve injury was apparent. This called into question all of the doctor's observations that neurologic and vascular checks were normal. No such checks had been made by the nurses in the recovery room.

The nurses had thought that the child cried more than would ordinarily be expected. They had received phone orders from the surgeon on two occasions for pain medication. After the father had observed the child's inability to move his toes and had brought him back to the ER, it was three hours before the surgeon arrived to evaluate the situation.

The physical therapy had required much travel, with loss of work time by the parents, and had been very uncomfortable for the little boy. He had recovered without residual, but had lost three years of his childhood.

In summary, this was an innocent child caused to suffer needlessly. The medical record had been completed late, causing some doubt as to its accuracy. In addition, the documentation was poor, and the patient had been three years in recovery. A sizable settlement was reached.

Dr. Avery is chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood, and associate director of Medical Affairs, St. Thomas Hospital, Nashville.

Where We Have Been and Where We Are Going

ROBERT BOWERS, M.D., Chairman
COMMUNICATIONS AND PUBLIC SERVICE COMMITTEE

Last year the TMA implemented the Community Awareness, Resource, and Education (CARE) program to strengthen communications between TMA, the media, patients, and physicians. Its goals are threefold: to increase the public's confidence in their personal physicians, both clinically and as patient advocates for health care needs; to establish the TMA as a significant resource for providing accurate, in-depth medical information to patients, the public, lawmakers, the media, and physicians; and to persuade and motivate physicians to become more proactive patient advocates.

CARE's first year was a successful one. We commissioned extensive, statewide research to give TMA a better understanding of patients and their perceptions of physicians. The study, conducted by Nashville Consulting Group (NCG) Research, was the focus of *TMA Today*, a newsletter distributed at the TMA 1990 Annual Meeting, and mailed to all members in *The Chart* publication. According to the research, Tennesseans have an increasing desire for their physicians to communicate with them more effectively.

Specifically, the research showed that characteristics considered most important by patients for their doctors include being up to date, having a good reputation, spending time with patients, having modern facilities and equipment, and charging reasonable fees.

In October, CARE produced Mission: Possible, a direct mail audio cassette package. Mission: Possible offered TMA members a series of free patient relations guidelines providing information on dealing with patients on the telephone, creating a good reception environment, minimizing the wait, easing billing procedures, interacting with employees, and a list of general communication tips. These were developed as a result of the patients' concerns determined from the research.

We expected a 2% or 3% request rate for the guidelines, but instead, TMA received 550 requests, and they're still coming in. That tells me we're responding to members' needs. Patient relations reminders are still available, and will be offered to new TMA members and presented through SVMIC risk management seminars.

Our positive radio public service announcements have been aired statewide, covering topics such as TMAP, healthy habits, new technology, and the importance of following doctors' orders. The radio spots were aired on 110 urban and rural Tennessee radio stations and were heard by more than 12 million Tennesseans.

We plan to increase TMA's media exposure in 1991. We will also conduct another statewide research survey to look for new trends and to see what issues interest patients. Using this additional research, we will formulate specific messages for specific audiences—patients, media, lawmakers, and business. We will pursue a proactive media spokesperson program to get positive TMA news exposure statewide, and will continue our successful radio program.

Because of its success, we are expanding the number of radio spots, and we will print schedules in the *Journal* so you will know when and where to listen for them. We are also looking at some new, innovative avenues through which to communicate to members and patients alike.

Our success is due in large part to the CARE committee members. I thank them for their commitment to building stronger physician communications throughout Tennessee. They are:

James T. Craig Jr., M.D., Jackson
John Lamb, M.D., Nashville
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representative), Franklin
William McKissick, M.D., Knoxville
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Oral Asacol in the Treatment of Mild to Moderate **Ulcerative Colitis: The Nashville Experience**

RON E. PRUITT, M.D.; DANIEL E. GREMILLION, M.D.; ROBERT W. HERRING, M.D.; ALLAN H. BAILEY, M.D.; THOMAS W. FAUST, M.D.; MICHELE POTTER, P.A.; and KAREN M. LONG, R.N., MSN

Introduction: Options for the treatment of inflammatory bowel disease have been limited until recently.1 Although sulfasalazine has become a mainstay of therapy, up to 30% of patients are intolerant of it because of the unwanted side effects.^{2,3} Most of these reactions can be attributed to the sulfa moiety of the compound, though the 5-acetylsalicylic acid (5-ASA) moiety is thought to represent the active portion of the drug.4-6 For that reason, much research has been focused on developing pure 5-ASA compounds, which can be delivered directly to the colon. Asacol (an oral 5-ASA tablet) is such a compound and is largely unabsorbed.7-11

Methods: As part of a multicenter study, 20 patients with mildly to moderately active ulcerative colitis (UC) were randomized in a double-blind, placebo-controlled fashion to receive Asacol 1.6 gm/day, 2.4 gm/day, or placebo. Patients could not take any medications (e.g., steroids, topical rectal therapy) before or during the study, which could influence their UC activity. Disease activity and symptoms were assessed throughout the six-week study by the following parameters: physician's global assessment (PGA), stool frequency, rectal bleeding, sigmoidoscopic examination, and patient's functional assessment. Improvement at six weeks was defined as reduction in PGA score and at least one other component score, with no score increased in severity.

Results: Overall clinical improvement was achieved in 60% of patients in the 2.4 gm/day Asacol group, 30% of the 1.6 gm/day group, and 25% of the placebo group. The 2.4 gm/day group also had improvement in each of the individual parameters, as well as in abdominal pain. The 1.6 gm/day group had improvement in PGA, stool frequency, and rectal bleeding, as well as in abdominal pain. No patients at this site were withdrawn from the study because of adverse effects.

Conclusions: Asacol at both 1.6 gm/day and 2.4 gm/day appears to be a safe and effective treatment for mild to moderate UC. Data gathered from other sites throughout the United States should provide statistically significant confirmation of our preliminary data.

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Reprint requests to Building C, Suite 407, 397 Wallace Road, Nashville, TN 37211 (Dr. Pruitt).

Christmas Present

JEFFERY S. WARREN, M.D.

"Hello buddy."

"Hey Dad. What's up?"

"Well I just needed to talk to you about something. Yesterday, when I was mowing the yard, I felt this real strange chest pain. It was like a pressure and it radiated down to my arms. What do you think I ought to do?"

"Dad!? Did you call your doctor? Did you go to the hospital? Have you had any more chest pain?"

"Not yet. Why, should I?"

Well, that's how it started. Before it was over Dad had seen his family doctor, his cardiologist, and the cardiologist and cardiothoracic surgeon at the Regional Cardiovascular Center. And before I knew it I was on a plane bound for North Carolina. The people at the medical center were very gracious to me, being a physician. I got to see my dad's cath. I was granted unlimited visitation rights in their units that normally allowed five minutes twice a day. But it still didn't change matters. I was still a physician put in that helpless situation that our patients know all too well. Seeing Dad postop day one from his bypass, white, pale, and cold with a machine supporting his respirations, with nitrite and phenylephrine drips keeping his heart going, the extent of my helplessness was driven home. I remembered the frightened look on my patients' faces. I'm sure it was on mine.

My dad did remarkably well. Two days postop he

was standing with only his hiplock in place. He was weak, sure, but he was complaining. Back to standard form, thank God. His postop course remained uneventful. He got home within a week. It was more than an answer to our prayers.

As medicine goes through its governmental-induced changes, and the RBRVS questions begin to cut a wedge between colleagues, it's at times like this that I, a family physician, truly appreciate my more specialized colleagues. I suppose it is only natural that good physicians can honestly disagree on issues related to the delivery of health care. But as these disagreements become more vocal in the near future, it is situations such as this that should remind us to pay extra heed to our colleague's problems, and not merely look out for our own best interests. As a family doctor, I take great pride in being able to provide a wide range of care to my patients. However, my ability to do that would be severely limited if my specialist colleagues were not there to help me when I need it.

When I go home for Christmas this year, I shall still feel pride in being a family physician specialist. But I will also know that I owe a debt to my other specialist colleagues: Dad's presence at the table.

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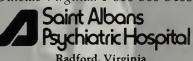
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Guidelines for the Appropriate Use of Do-Not-Resuscitate Orders

At its 1990 Annual Meeting, the House of Delegates referred Report C of the Council on Ethical and Judicial Affairs to the Board of Trustees for report at the 1990 Interim Meeting. This report was prepared in response to that action.

Overview

Cardiopulmonary resuscitation (CPR) is routinely performed on hospitalized patients who suffer cardiac or respiratory arrest. Consent to CPR is presumed since the patient is incapable at the moment of arrest of communicating his treatment preference and failure to act immediately is certain to result in the patient's death. Two exceptions to the presumption favoring CPR have been recognized, however. First, a patient may express in advance his preference that CPR be withheld. If the patient is incapable of expressing a preference, the decision to forgo resuscitation may be made by the patient's family or other surrogate decision maker. Second, CPR may be withheld if, in the judgment of the treating physician, an attempt to resuscitate the patient would be futile.

In December 1987, the American Medical Association's Council on Ethical and Judicial Affairs issued a series of guidelines to assist hospital medical staffs in formulating appropriate resuscitation policies. The Council's position on the appropriate use of CPR and do-not-resuscitate (DNR) orders is updated in this report.

Background

Closed-chest cardiac massage was first described in 1960 as a means of restoring circulation in victims of cardiac arrest. Kouwenhoven and his colleagues successfully used external chest compressions, both alone and in conjunction with artificial ventilation, to resuscitate 20 patients in whom cardiac arrest had occurred. In the years immediately following the development of this life-sustaining technique, CPR was administered primarily to otherwise healthy individuals who experienced cardiac or respiratory arrest during surgery or

This is AMA Council on Ethical and Judicial Affairs Report D, submitted to the House of Delegates at its Interim Meeting in Orlando in December 1990.

as a result of near-drowning.² Today, however, it is widely recognized that CPR can be attempted on any individual who experiences a cessation of cardiac or respiratory function. Since such events are inevitable as part of the dying process, CPR potentially can be used on every individual prior to death.

In health care settings, CPR is viewed as an emergency procedure that is routinely administered to patients who experience cardiopulmonary arrest. Most health care institutions employ specialized teams of trained personnel to promptly administer CPR when an arrest is detected in a patient. As with other emergency procedures, consent to CPR is presumed since the patient is incapable at the moment of arrest of communicating his treatment preference and failure to render immediate care is certain to result in the patient's death.

The frequent performance of CPR on patients who are terminally ill or who have little chance of surviving for more than a brief period of time has prompted concern that resuscitation efforts may be employed too broadly.

Incidence and Success Rates for CPR

Studies suggest that CPR is attempted in approximately one-third of the 2 million patient deaths that occur in U.S. hospitals each year.³ The proportion of these attempts that are considered successful ultimately depends upon the perceived objectives of CPR. For example, success rates will vary significantly depending upon whether the goal of CPR is viewed as the restoration of cardiopulmonary function or, alternatively, as discharge of the patient from the hospital.

Of the patients who receive CPR, one-third survive the resuscitation effort, and one-third of these individuals, in turn, survive until discharge from the hospital.³ A review of 13,266 cases reported in the medical literature between 1960 and 1980 revealed that 39% of hospitalized patients who received CPR initially survived the procedure, and 17% survived until they were discharged from the hospital.⁴ A similar review, conducted for 12,961 cases in which CPR was attempted, found that 38.5% of the patients survived at least 24 hours and 14.6% of the patients survived until discharge.⁵ Longer periods of survival have not been evaluated as extensively. However, one study found

that, of patients who survived until discharge from the hospital, 80% were still alive six months later.⁶

The outcome of CPR is dependent upon the nature and severity of the patient's underlying illness prior to cardiopulmonary arrest. In a study of 294 patients resuscitated in a Boston hospital, none of the patients with metastatic cancer or pneumonia survived until discharge from the hospital. Among patients with renal failure, only 2% survived until discharge. A study of 329 veterans who received CPR produced similar results. Of the 63 patients with metastatic cancer, 37% survived initial resuscitation; none survived until discharge. In addition, of 73 patients with a diagnosis of sepsis, 45% survived the initial resuscitation effort, but only one of the 73 patients survived until discharge from the hospital.

Patients who survive initial resuscitation but die before discharge from the hospital almost always spend the days or weeks immediately preceding their death in an intensive care unit, generally as the recipients of invasive therapies and monitoring techniques. One study found that 78% of the patients admitted to an ICU after cardiac arrest received invasive interventions. In addition, at least one study has suggested that approximately 11% of patients who survive initial resuscitation will undergo CPR at least one other time during their hospital stay.

However, the recipients of CPR who survive past the time of discharge generally do so without severe impairment. One study found that 93% of such patients were alert and oriented upon leaving the hospital. Gross impairment of mental status was reported in only one of 41 survivors. All of the patients in the study, however, reported a decrease in functional status following CPR. For most, this change in activity was due to fear of another cardiac arrest, rather than underlying pathology.

Despite the widespread use of CPR on hospitalized patients, two exceptions to the presumption favoring CPR have been recognized. First, patient preferences regarding the use of CPR may be expressed in advance of cardiopulmonary arrest. Second, resuscitation should not be attempted if, in the judgment of the treating physician, the procedure would be futile.

Patient Preferences as a Basis for Withholding CPR

It is widely acknowledged that patients have the right to refuse medical treatment, even when such a refusal is likely to result in serious injury or death. A patient, therefore, may express in advance his preference that CPR be withheld in the event of cardiac arrest. Such a refusal may serve as the basis for a DNR order. A decision to withhold CPR from an incompetent patient can be made by a surrogate decision maker, based upon the previously expressed preferences of the patient or, if such preferences are unknown, in accordance with the patient's best interests.

DNR orders, at least in theory, facilitate autonomous

action by permitting patients to express their preferences regarding the use of life-prolonging treatment at a time when they are capable of making informed decisions. Physicians and others generally agree that patients should participate in decisions regarding the use of resuscitation. One study found that 93% of the 151 physicians surveyed believed that patients should be involved in making decisions about CPR.6 However, only 10% of these physicians actually discussed resuscitation preferences with their patients prior to cardiac arrest.6 These findings are not inconsistent with data obtained from similar studies. Research consistently has shown that only 20% of hospitalized patients with DNR orders discussed their resuscitation preferences with a physician prior to implementation of the order.6.10,11

These data are cause for concern, given the frequent use of DNR orders. A study of 244 inpatient deaths at a community teaching hospital revealed that 68% of the patients who died had a DNR order at the time of their death. Similar studies have found that up to 70% of patients who die in a hospital have a DNR order recorded on their chart, and that 3% to 4% of all inpatients have such an order at some point in time during their hospital stay. 13,16,17

In practice, physicians and patients alike may find it difficult to engage in discussions about the possibility of patient death, particularly in the early stages of hospitalization. As the need for such a discussion becomes evident, the patient no longer may be capable of participating in the decision making process. This dilemma is illustrated by the results of a study of 389 patients who were the recipients of DNR orders. The study found that 76% of the 389 patients were mentally impaired at the time the DNR order was discussed, and therefore were incapable of indicating a treatment preference. However, only 11% of these patients were mentally impaired at the time of admission to the hospital.¹⁰

Even when patients are capable of making resuscitation decisions, studies have shown that they may not be actively involved in discussions about DNR orders. One such study found, for example, that 13 of 72 decisions not to employ resuscitation were discussed with the family, rather than the patient, despite the physician's perception that the patient was capable of making informed decisions. Similar studies have produced conflicting evidence, however, suggesting that resuscitation decisions are discussed with members of the patient's family in as few as 33% or as many as 86% of cases, depending upon the study. 6,10,11

Despite these findings, evidence suggests that most patients wish to discuss their preferences about resuscitation with their physician. Sixty-eight percent of the respondents in one survey indicated a desire to discuss the use of life-sustaining treatment with their physician, but only 6% had been afforded an opportunity to do so. 19 In a similar study, 16% of the 200 patients interviewed had discussed the use of life-prolonging medical treatment with their physicians. An additional 47% wished to participate in such discussions, but had not

actually done so.²⁰ Interestingly, 37% of the 200 patients who participated in this survey did *not* wish to discuss with physicians the use of life-prolonging measures. Clearly, patients as well as physicians may be reluctant to engage in discussions about the possibility of death or the likelihood of achieving a poor medical outcome.

The lack of patient participation in decisions about DNR orders is disturbing. An absence of patient involvement may result in mistaken impressions about the medical procedures employed during resuscitation efforts and the probable outcome of CPR, or may result in the implementation of decisions that are not in accord with the patient's values and preferences. Studies suggest that decisions made by families and physicians often fail to correspond with the choices that would have been made by the patient. One such study attempted to compare the resuscitation preferences of 25 patients who survived CPR with the decisions that their physicians thought they were most likely to make. Eight of these patients would have refused the use of resuscitation and did not wish to undergo CPR in the future. However, only one of 16 physicians accurately perceived their patients' wishes.6 A similar study found that physicians are no more accurate in predicting the resuscitation preferences of patients than would be expected by chance alone.²¹ In addition, evidence suggests that physicians may tend to perceive a patient's quality of life more negatively than does the patient.²²

Futility as a Basis for Withholding CPR

The second exception to the presumption favoring CPR is applicable to cases in which an attempt to resuscitate the patient would be futile in the judgment of the treating physician. A physician is not ethically obligated to make a specific diagnostic or therapeutic procedure available to a patient, even upon specific request, if the use of such a procedure would be futile.²³⁻²⁵ However, judgments of futility are subject to a wide variety of interpretations. The potential impact of this variability is profound, given recent evidence that perhaps as many as 88% of all DNR orders are based in part upon the physician's judgment that resuscitation of the patient would be futile.²⁶

Evidence suggests that terms such as "futility," when used by physicians to express the probability of achieving a specified outcome, have a variety of potential meanings that are understood differently by different physicians. The extent of such variability has been demonstrated by studies that examine how health care professionals, in comparison to colleagues and laymen, quantify verbal modifiers used to express probabilities or frequencies (e.g., rare, atypical, common, infrequent). In one of these studies, 22 terms were converted by study participants into numerical percentages. For example, participants described a "rare" event as one that is likely to occur in less than 10% of cases. The findings from the study revealed that the interpretations at-

tached to 17 of the 22 expressions varied too widely among individuals to assure that the intended meaning was effectively communicated.²⁷

Like these verbal expressions of frequency, the term "futility" does not express a discrete and identifiable quantity, but rather encompasses a range of probabilities and is likely to be interpreted in different ways by different physicians.²⁸ It has been noted, for example, that some physicians describe a medical treatment as futile only if the possibility of success approaches 0%, whereas others associate futility with success rates as high as 13%.²⁵ The meaning intended by the term "futility" therefore may vary among physicians when the expression is used to indicate the probability that a specified outcome will occur.

Determinations of futility also may vary from one physician to another based upon the perceived objectives of medical treatment and the criteria that are used to evaluate outcome. For example, in a purely physiological sense, the objective of CPR is to restore cardiac and respiratory function to patients who experience cardiopulmonary arrest.²⁹ CPR, under such a scenario, is considered a success if the patient survives the initial resuscitation effort. Conversely, an attempt to resuscitate the patient is considered futile in the absence of a reasonable potential of restoring these vital functions.

The successful application of CPR also has been gauged by criteria that relate to the length of patient survival. Such criteria include, for example, survival for at least 24 hours following initial resuscitation, survival until discharge from the hospital, and survival for some other timeframe (typically one month to a year after cardiac arrest). Using this definition of successful treatment, a judgment of futility is warranted if CPR is unlikely to prolong the life of the patient for the period of time set forth in the criteria. The presumption is that survival for a shorter time would not be of value to the patient.

This approach to defining futility replaces a medical assessment (i.e., whether a reasonable potential exists for restoring cardiopulmonary function to the patient) with a nonmedical value-judgment that is made by the treating physician (i.e., whether one day, one week, or one month of survival—perhaps in a severely debilitated state—is of value to the patient). This interpretation of futility is inconsistent with the principle of patient autonomy, which requires that patients be permitted to choose from among available treatment alternatives that are appropriate for their condition, particularly when such choices are likely to be influenced by personal values and priorities.

Similar obstacles to patient autonomy are encountered when the success of CPR is judged by its ability to benefit the patient in a manner that is viewed as appropriate by the treating physician or by others. Judgments of futility, in such circumstances, are rendered if the specific benefits desired for the patient are not likely to be achieved. Examples of some benefits that have been described as appropriate indica-

tions for CPR are a "meaningful existence" after resuscitation or an acceptable quality of life for the patient. These determinations, which attempt to define the types of treatment and the qualities of existence that constitute a benefit for the patient, undermine patient autonomy because they are based on the value-judgments of someone other than the patient.

These judgments of futility are appropriate only if the patient is the one to determine what is or is not of benefit, in keeping with his personal values and priorities. Patients, therefore, should be encouraged to discuss with their physicians the expected benefits and objectives of medical treatment and to engage in an ongoing dialogue regarding the potential for achieving these goals. Once the objectives of the patient have been clearly expressed, the physician can determine and convey to the patient whether CPR or other medical treatments are likely to be effective in helping to achieve those goals. Resuscitative efforts, under such circumstances, would be considered futile if they could not be expected to achieve the goals expressed by the informed patient. This definition of futility not only respects the autonomy and value-judgments of individual patients, but also allows for the professional judgment and guidance of physicians who render care to the patient.

These various interpretations of futility have important implications for the use of DNR orders. In the unusual circumstance when efforts to resuscitate a patient are judged by the treating physician to be futile, even if previously requested by the patient, CPR may be withheld. In such circumstances, when there is adequate time to do so, the physician should inform the patient, or the incompetent patient's surrogate, of the content of the DNR order, as well as the basis for its implementation, prior to entering a DNR order into the record.³⁰ The physician also should be prepared to discuss appropriate alternatives, such as obtaining a second opinion or arranging for transfer of care to another physician.

Guidelines for the Appropriate Use of DNR Orders

In order to provide assistance to physicians in managing the care of patients for whom CPR may not be appropriate, the Council on Ethical and Judicial Affairs has updated its resuscitation guidelines, as follows:

- Efforts should be made to resuscitate patients who suffer cardiac or respiratory arrest except when circumstances indicate that CPR would be futile or not in accord with the desires or best interests of the patient.
- Physicians should discuss with appropriate patients the possibility of cardiopulmonary arrest. Patients at risk of cardiac or respiratory failure should be encouraged to express in advance their preferences regarding the use of CPR. These discussions should include a description of the procedures encompassed by CPR and, when possible, should occur in an outpatient setting when general treatment preferences are discussed, or as

early as possible during hospitalization, when the patient is likely to be mentally alert. Early discussions that occur on a nonemergent basis help to assure the patient's active participation in the decision making process. In addition, subsequent discussions are desirable, on a periodic basis, to allow for changes in the patient's circumstances or in available treatment alternatives that may alter the patient's preferences.

- If a patient is incapable of rendering a decision regarding the use of CPR, a decision may be made by a surrogate decision maker, based upon the previously expressed preferences of the patient or, if such preferences are unknown, in accordance with the patient's best interests.
- The physician has an ethical obligation to honor the resuscitation preferences expressed by the patient or the patient's surrogate. Physicians should not permit their personal value-judgments about quality of life to obstruct the implementation of a patient's or surrogate's preferences regarding the use of CPR. However, if, in the judgment of the treating physician, CPR would be futile, the treating physician may enter a DNR order into the patient's record. When there is adequate time to do so, the physician must first inform the patient, or the incompetent patient's surrogate, of the content of the DNR order, as well as the basis for its implementation. The physician also should be prepared to discuss appropriate alternatives, such as obtaining a second opinion or arranging for transfer of care to another physician.
- Resuscitative efforts should be considered futile if they cannot be expected either to restore cardiac or respiratory function to the patient or to achieve the expressed goals of the informed patient.
- DNR orders, as well as the basis for their implementation, should be entered by the attending physician in the patient's medical record.
- DNR orders only preclude resuscitative efforts in the event of cardiopulmonary arrest and should not influence other therapeutic interventions that may be appropriate for the patient.
- Hospital medical staffs should periodically review their experience with DNR orders, revise their DNR policies as appropriate, and educate physicians regarding their proper role in the decision making process for DNR orders.

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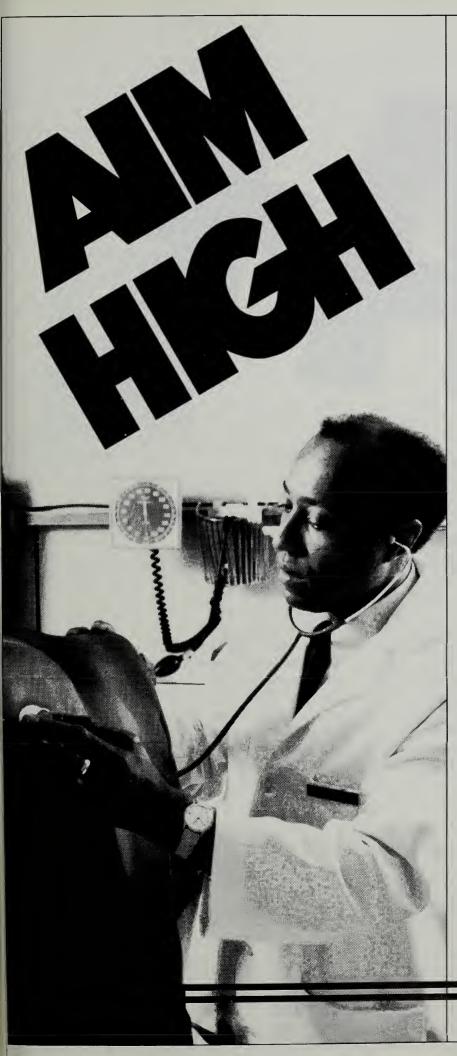
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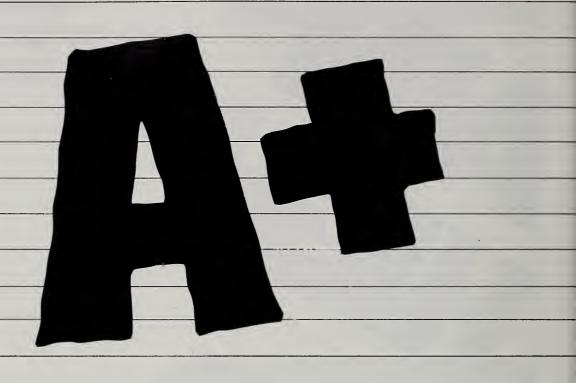
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president's page



HOWARD L. SALYER

United We Stand

It is an honor for me to be writing my first message to the members of the Tennessee Medical Association, and I want to thank each one of you for your vote of confidence in my abilities. The Tennessee Medical Association has had many distinguished leaders, and my goal is to uphold their example of leadership and the policies and programs they helped to implement.

This year—possibly more than any other—promises to be one of change because of the many forces in the world that are actively working to alter the medical profession as it now stands. We will have to fight many battles in the coming year, including further challenges from alternate health care providers who are attempting to gain more recognition and widen their scope of patient care. We will have to face the increasing constraints of outside parties, including insurance companies, and legislation that will directly influence how we provide care to our patients. And we may also have to face the issue of a health tax and how that will affect our patients as individuals and the practice of medicine as a whole.

In order to meet these and other challenges, it is imperative that we stand together, not only as individual physicians interested in preserving the excellence of our profession, but also as members of the Tennessee Medical Association. This organization, which represents all of us on a state level, plays a vital role in answering the challenges of the future and preserving our freedom to practice medicine effectively.

As the old saying goes, a chain is only as strong as its weakest link. I urge each of you to become a stronger link in the chain, to stand united, and to work with perseverance to answer these and the many other challenges we will face.

With your help, we will succeed.

Hal h Salyer 4. D.

journal of the tennessee medical association

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MAY, 1991

editorials

What's Good for General Bullmoose . . .

The weapon upon which politicians, labor, and management alike look with utmost loathing is ridicule, particularly when it takes the form of political cartoons. The reason they despise it so is that they fear it more than they fear hellfire and eternal damnation—maybe not damnation in the hereafter hereafter, but at least damnation in their temporal

hereafter. The reason for that overweening dread is their conviction that ridicule is the surest way to both. And maybe it is. That dread has caused Al Capp, Walt Kelley, and Gary Trudeau, for instance, to be banned on occasion from one or another of our newspapers or syndicates for the duration of some particular series, a step the press hadn't the wit to recognize as playing right into the hands of their tormentors.

The doodlings of the late Al Capp often went unrecognized as commenting on the political and social scene because his barbs were disguised in the grotesque portrayals of seemingly witless hillbillies, who were in fact the least outrageous of his characters. It was about the time that Robert McNamara, erstwhile president of General Motors, was U.S. Secretary of Defense, that General Bullmoose, the spit'n image of Teddy Roosevelt, announced that what was good for General Bullmoose was good for the country; the General delivered that pronouncement time and again for some years. I suspect that the powers at General Motors got pow'ful tired of hearing it before it was all over with. They did, however, earn it fair and square. They are still earning it.

Li'l Abner was not, of course, singling out General Motors, nor am I. Some years back the brother of a friend of mine was an employee of one of the large oil companies—Shell, 'less'n I disremember-stationed somewhere in South America. Shell's employees were assured that if they professed loyalty to any entity whatever-and that included both family and native land—ahead of their loyalty to the company, they were at liberty to seek employment elsewhere. The employee belonged body and soul to the company sto', to paraphrase Tennessee Ernie. That requirement of fealty by no means ended with the death of Al Capp, as many an oil company employee in the Middle East can affirm. Some of them left Kuwait only a step ahead of the last diplomat, if indeed they left at all. General Bullmoose was simply the prototype big, and General Motors was, and is, indeed big.

The literary woods are full of exhortations toward the industry of the ant. The Bible, for example, admonishes: "Go to the ant, thou sluggard; consider her ways and be wise." It seems there is one ant, in exercising its characteristic industry, that turned up a tad short on caution. To try to salvage the situation as much as possible, that ant needs to emulate the ant in Walt Kelley's *Pogo*, which went about protecting itself from harm by proclaiming, sometimes stridently, "Scoosh a ant an' you gits rain!"

At the same time this particular ant was indulging its incautious industry, Goliath, another prototype big, was going about scooshing any ant that invaded his space. Such is not without precedent, of course, since ants are usually unwelcome at, for example, picnics. There is no indication, though, that this particular ant was raining on anybody's parade, so to speak; rather, it was simply going about minding its own business. The trouble started when Goliath decided that the business the ant was minding was not its but his, and like the troll at the bridge, moved in and set about exacting tribute.

The incautious ant in this particular story was engaged in the manufacture of toy automobiles to titillate the fancy of the young, doing along the way some exacting of its own from parental purses. The toys it made were actually models of the real thing. The ant's gross revenues are about \$200 million. Goliath, whose gross revenues are approximately a thousand times that—to be specific, \$125 billion— is trying to muscle in on the ant's act, demanding royalties on each toy car sold. According to the Wall Street Journal, which aired this marvelous exposé, Goliath decided that since everybody from professional sports teams to sneaker manufacturers license their trademarks, why shouldn't they? Well, why shouldn't they? "This is a profitable business that we can profit from," quoth Goliath, quoth he.

Sure.

Goliath's trademark counsel used to collect model toys himself. "To destroy the hobby," allowed counsel, "is antithetical to what we want to do." As though Goliath really gives a hoot. It may indeed be a fact that counsel really does not want to torpedo anything at all, and it even probably is true, at least for our purposes here. But General Bullmoose, aka Goliath? It is to laugh. Is there anything else but money? What's good for General Bullmoose. . . .

I thought the whole thing hilarious. In fact, it is funnier by a heap than anything Kelley, Trudeau, and Capp all put together could have thought up. That web is sticky though, an' lots o' folks could git caught in it less'n they watch they step. Jest be keerful 'tain't ye'uns, er else, like Gin'l BM, Ol' Scratch'll gitcha—too.

I rest my case.

J.B.T.

A Life of Its Own

Back in January, at about the time we were putting the March issue of the *Journal* to bed, the President of the United States gave the word, and bombs and rockets from the greatest air armada ever assembled began to rain on the Iraqi military in response to the United Nations resolutions requiring that Kuwait be freed from Iraqi occupation by whatever means necessary. President Saddam Hussein having proved intransigent, orders came to drive him out, and Operation Desert Shield was quickly transformed into Operation Desert Storm. In that issue of the *Journal*, I opined that, among other things, by the time you got to read my words, Kuwait might perhaps be free, but that I wasn't counting on it. I have to confess that at the time I thought that was a gross bit of hyperbole. As it turned out, though, Kuwait had been freed even before my prognostications reached you.

Some of the other conditions I mentioned have not yet been satisfied, and some others of them may never be, but my batting average is at that a lot better than I ever envisioned it would be. Nobody expected that the war would be prosecuted with such dispatch, and with such astonishingly few coalition casualties, especially considering the alleged might and sophistication of Iraq's battle-hardened fighting machine. What it apparently proved is that even the most rigorous battle-hardening is no match for the battle-softening of a month of intense aerial bombardment such as the Iraqi troops and installations were subjected to.

After about the first three days of being treated to a blow-by-blow, or perhaps more accurately, a bomb-by-bomb, account of Operation Desert Storm, one of our colleagues commented that his wife had announced, with more than a tinge of disgust, "My God! This war has taken on a life of its own!"

I knew immediately what she meant. It was not really that the war had taken on a life of its own, since that is the nature of wars, but that the media coverage of the war had. In the initial stages the media, or more accurately CNN, did a marvelous job of keeping us up to date, but as the war dragged on, the media became progressively more intrusive. I found the press briefings particularly offensive, and developed the firm conviction that all briefings should be terminated just as soon as the briefing officer completed his statement. All that the probings of the reporters did for me was to confirm that they should not be allowed: I gleaned almost nary a bit of added information through what could be most charitably described as their persistent, insistent, and frequently churlish nit-picking. But I've told you all this before; nothing that has happened has done any more than to make me more hardened in my conviction.

On the other hand, I developed utmost respect for

the military and Pentagon spokesmen, who tolerated with singular patience and aplomb that continuous barrage of generally childish drivel from what was characterized by the editor of Soldier of Fortune magazine as the biggest bunch of dorks and boobs he had ever had the misfortune to be cooped up with. The press complained continuously that the level of censorship they were subjected to in the theater was higher than that in any previous war. That is misleading, however; never before has it been possible to have instantaneous coverage of every bullet, bomb, and casualty, where what you see is what the photographer was getting at the moment he was getting it. There has always before been the opportunity for editing submissions before spreading them out for public viewing. Without such an opportunity, there are all sorts of possibilities for giving aid and comfort to the enemy, even without meaning to. Since most reporters have shown themselves incapable of exercising restraint, restraint had to be exercised for them.

The public has no need to know everything, or to know anything in depth, either, for that matter. The public hankering for news, which likely actually occupies a much lower level than the media would like to think, or have us to think, is mostly only an attempt to satisfy an idle, and not infrequently morbid, curiosity, and most of the media activity is simply by way of pandering to it. It is not so much that what the media do is wrong, though some of it is; it is just that much of it is so unnecessary. Certainly no one has any right at all to probe for any information that would aid the enemy. Military spokesmen have to keep reminding the reporters, often sharply, of that, which is something they should already know. But do you think such rebuffs deter them? Not even until the next question.

That is why the war seemed to have taken on a life of its own. The life that resulted, though, was necessarily a deformed creation, a media-generated cyborg-like caricature of reality. Had it not been, the coalition's "Hail Mary" encircling maneuver to the West through Iraq would doubtless have failed, since its success relied upon the total breakdown of Iraqi intelligence. Otherwise, the Republican Guard would have had their guns pointed West instead of South, as they did; many allied losses would have resulted, and the war would likely have been substantially prolonged. The media received from General Schwartzkopf the backhanded compliment of having been useful in keeping the Iraqis in the dark.

The darkness was, you can bet, unintended, and hence any compliment undeserved.

J.B.T.

Back to Bali Ha'i: Reprise

No alien land in all the world has any deep strong charm for me but that one, no land could so longingly and so beseechingly haunt me, sleeping and waking, through half a lifetime as that one has done. Other things leave me, but it abides; other things change, but it remains the same ... in my nostrils still lives the breath of flowers that perished twenty years ago.

-Mark Twain

All peoples, or I should think all—at least all that I know anything about—have their own body of tradition. Not having a written language, the primitive ones very carefully pass along their traditions orally from one generation to the next. Such bodies of knowledge probably suffered no more attrition through that method than from any other. After writing was developed, the closest-held secrets of the tribe, and often their sagas, were still passed selectively by word of mouth. Tennyson's Idylls of the King, for instance, starts out, "That story which the bold Sir Bedevere told in the white winter of his age to those about him. ... " faithful to his dying king's charge; or as it comes across in the song, "Don't let it be forgot that once there was a spot, for one brief, shining moment, that was known as Camelot."

On the other hand, until Wycliffe translated the Bible into the vernacular, few but the clergy could read it, since most others who could read at all could not read Latin. Holy Scripture was kept unintelligible to the riff-raff, which so far as the clergy were concerned was everybody else, so that they could not formulate their own interpretations. Just as the clergy had anticipated, such wildcat interpretations were as often as not embarrassing to the establishment, and sowed the seeds of schism within the Church. Such is the power of words.

Because the Egyptians wound up worshiping as idols practically everything in the animal kingdom they had made representations of, which was practically everything, God commanded Israel that they not make any images of anything, or bow down to them or serve them. Israel did anyway, and they suffered for it. The Christians started out with that same proscription, but the churches shortly became filled with all sorts of icons to help the faithful remember what the church wished them to remember. Religions that had demons in their pantheon played no favorites. At the same time, though the pagan religions made all sorts of representations of the unseen world, the populace often wouldn't, and indeed often still won't, allow any such representation of themselves, such as, for example, photographs, on the grounds that such images might in some way be used against them. Such is the imputed power of the image.

Over the past 20 years Masterpiece Theater has brought viewers of PBS the cream of British Broadcasting Company (BBC) productions, under the watchful eye, and with the sage, witty comments of now octogenarian Alistair Cooke, who was for many years the Washington correspondent for the *Manchester Guardian*, and for many of those years one of my favorite writers. In fact, his column was the one place in the days after the Second World War where one had some chance of finding out what was going on in our nation's capital. Now, more's the pity, there is no place that offers such a chance. But I digress.

Anyway, to push on, at the end of a recent marvelous series of the accounts by P.G. Wodehouse, another favorite of mine, of the exploits of gentleman's gentleman Jeeves and his gentleman Bertie Wooster, Alistair Cooke commented that though the acting was magnificent and the series eyecatching and humorous, the best of Wodehouse was missing from it. Like Dickens, he said, Wodehouse was a master of description, and that can never be communicated visually.

My book of famous quotations doesn't tell me, so I can't tell you, who it was once said, "One picture is worth a thousand words"; maybe you can tell me. In any case, it has been widely quoted. 'Tain't so. It's not, as anyone who knows me can affirm, that I have anything against pictures, or at least not generically. I have taken a lot of them. Some pictures taken by others offend me, and other pictures, some among those taken by those same photographers, may be particularly pleasing to me. But no picture can ever replace words. It is like saying apples will take the place of oranges. They cannot. Both are good; together they make ambrosia. Which explains the plethora of elaborate, expensive "coffee-table" books.

Words have always been used to conjure up mental images; reading is unsurpassed as a means of developing the imagination. Nowadays, though, unless I miss my guess, most reading is done solely to garner information; our image-smithy is the tube, which has replaced the imagination. The rapidity and continuity of motion precludes any sort of contemplation. There is so much we are now able to do, with only a limited, finite time in which to do it, that life is in danger of becoming one long, heated chase of an undefined, indeed likely undefinable, quarry that remains forever elusive. There is small opportunity to savor anything at all—to smell the plumeria along the way—unless one makes the conscious effort. As an inveterate sightseer and picture-taker, I'm

writing here of things I know a good deal about.

Being an armchair traveler these days offers possibilities undreamt of only a generation ago. Even as recently as my own youth, which now that I think about it wasn't really all that recent, sources of such second-hand peregrinations were confined to the likes of the National Geographic and Richard Halliburton's international escapades, with an occasional travelogue at the movies thrown in. Some perfectly marvelous accounts of travels were also written in the 17th and 18th centuries, when places were harder to get to, and as a result more or less untrammeled-I say more or less because the Romans, among others, had trammeled a lot of places pretty badly, but had not for centuries. And anyway, trammeling was lightweight in those days, and healing quick. But no more.

If seeing what's there is all you want to do, you can in pretty short order see what's nearly anywhere without stirring off your—uh—couch, particularly if you have a VCR. If that's what you want, you've got it without going anywhere at all, except to the sandbox occasionally, and maybe now and then to the fridge. You don't even have to turn pages, as you do with picture books. You can just watch and listen, and occasionally punch a button on the remote. If that's what you want.

Well, I don't want; I'll settle for it when that's the best I can get, but that's not what I want. The reason it's not is summed up in the last sentence of Mark Twain's comments about the Sandwich Islands, now the state of Hawaii; he was speaking at the time more specifically of the island of Kauai. Like him, I can still smell the salt air and the fragrance of the plumeria, and feel the soft caress of the gentle breezes on my bare skin. Mark Twain never returned to his Paradise, but he carried its memory to his grave. There is no possibility of vicariously experiencing such pleasure, though I might never have found that out had I never stirred off my—uh—well, couch. As I have commented before on occasion, travel may be broadening, but it isn't restful. It isn't, sure enough, but its memories can be very soothing, and even its traumas are quickly softened by time so that the total experience is pleasant to remember. And, ah, just sniffing the plumeria along the way!

Mark Twain never returned, but he did put it on paper. As I look at my own pictures or videotapes, I can still smell the plumeria and feel the soft caress of the gentle breezes on my bare skin—sort of, if I close my eyes and try real hard; but I can't do that at all when I look at other people's pictures, even though they may be aesthetically pleasing. I can do it, though, as I read Mark Twain's account of it; it's as

if I'm there! What's more, I can do the same for places I've never been. The visualization may not be accurate, but the sensation is real enough. Imagination! The worst thing about travelogues is the commentaries, which are too intrusive to allow thought; commentators seem to feel that unless they are talking all the time, they are not earning their keep. It is a moment of silence, and not a picture, that's worth a thousand words. I frequently watch such things with the sound off.

Since I thought it might be my last visit to the Islands, when I returned there a year ago this past December I took the precaution of spending some time on each of the islands. After it was all over, and I had had time to give the matter some thought, I decided that though sure enough that visit might indeed have been my last, it would not be if I could help it. While fully recognizing the precariousness of existence, what with war, disease, natural disasters, and all manner of uncertainties all about, I determined that if I can have anything to do with it, that visit will not be my last.

The Islands do not bite everybody who goes there—just almost everybody; they are overrun by ex-service personnel who caught the disease. Sam Clemens' failure to repeat was not for want of wanting. For Mr. Clemens the trip would indeed have been long and arduous; the long over-water flight in a widebody just seems that way. I believe the ardors of a return visit would not have deterred him any more than they would me. When all is said and done, I find that neither the written word nor pictures, mine or those of anyone else, do anything to help. The primitive peoples knew better than we about communication. Through all the veneer, one voice drowns out everything else. Along with the breath of flowers in my nostrils and the sea breezes on my bare skin, the seductive call of Bali Ha'i, "Come to me, your special Island," continues ringing loud and clear in my ears.

J.B.T.



John H. Evans, age 56. Died February 19, 1991. Graduate of Duke University School of Medicine. Member of Knoxville Academy of Medicine.

Clifton E. Irwin, age 82. Died February 16, 1991. Graduate of University of Tennessee College of Medicine. Member of Knoxville Academy of Medicine.

George Litton Kline, age 50. Died March 16, 1991. Graduate of Duke University School of Medicine. Member of Scott County Medical Society.

Lester F. Littell Jr., age 71. Died February 16, 1991. Graduate of Loma Linda University School of Medicine. Member of Chattanooga-Hamilton County Medical Society.

new members

The Journal takes this opportunity to welcome these new members to the Tennessee Medical Association.

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

John M. Breen, M.D., Chattanooga Brian D. Johnson, M.D., Chattanooga Carole M. Meyer, M.D., Chattanooga

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

Donald Charles Correll, M.D., Jackson Ralph F. DeJarnatte Jr., M.D., Jackson James Lee Ellis Jr., M.D., Jackson Karl E. Misulis, M.D., Jackson

FRANKLIN COUNTY MEDICAL SOCIETY

Peter Blanc, M.D., Winchester Brian Worthington, M.D., Winchester

GILES COUNTY MEDICAL SOCIETY

Mohamed Ziauddin, M.D., Pulaski

KNOXVILLE ACADEMY OF MEDICINE

Jonathan N. Degnan, M.D., Knoxville Norman C. Walton, M.D., Knoxville

NASHVILLE ACADEMY OF MEDICINE

Paul S. Daugherty, M.D., Madison William Richard Stewart, M.D., Nashville Gertrude Odhmig Stone, M.D., Nashville Harold D. Thompson, M.D., Brentwood Diane Marie Vosberg, M.D., Brentwood Laura L. Williams, M.D., Nashville

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

Ronald Lech, M.D., Oak Ridge

personal news

Dale E. Douglas, M.D., Cookeville, has been elected a Fellow of the American College of Surgeons.

Nelson Gwaltney, M.D., Bristol, has received the Distinguished Service Award from the Bristol Jaycees.



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JUNE, 1991 VOL. 84, NO. 6

Abstract of the Proceedings of the House of Delegates Of the Tennessee Medical Association Memphis, Tennessee—April 11-13, 1991

Call to Order

The 156th annual meeting of the Tennessee Medical Association was conducted in Memphis, Tennessee, April 11-13, 1991, with headquarters in the Peabody Hotel. The House of Delegates met initially at 10:00 AM, April 11, 1991, with George H. Wood, M.D., Knoxville, presiding as speaker of the House and Thurman L. Pedigo, M.D., McMinnville, as vice-speaker.

Invocation

At the opening session, John H. Burkhart, M.D., Knoxville, gave the invocation: "In the beauty of the springtime with its evidences of renewed and vibrant life all around us, we thank you for the message this brings of your holy purpose to care for your creation, and to demonstrate to all mankind your power over the pain and afflictions including death that come to all living things. Remind us, your servants, that whatever strength, ability, and power we might have comes from you, and is to be used with concern for the benefit and support of those whose care you have entrusted to us. In our meeting together we seek to find ways to serve you better. Be with us, we pray, as long as this is our objective, for without your blessing, we know that our plans and efforts are futile. We believe you have called us, and we are here to respond to your call."

Report of the Committee on Credentials

C. Ferrell Varner, M.D., Memphis, chairman of the Committee on Credentials, reported there was a quorum present. The speaker declared the House was in session.

1990 Minutes Approved

The speaker announced that an abstract of the minutes of the last regular session of the House of Delegates was reproduced in the June 1990 issue of the *Journal of the Tennessee Medical Association*. It was moved and seconded that the abstracted minutes of the 1990 session of the House of Delegates be approved as published in the June 1990 issue of the *Journal*. The motion was adopted.

Reference Committees

The speaker announced the members of the reference committees to consider reports, resolutions, amendments, and all matters requiring action by the House of Delegates.

REFERENCE COMMITTEE ON CREDENTIALS

C. Ferrell Varner, M.D., Memphis, *Chairman*Michael P. Miller, M.D., Nashville
William S. Muse Sr., M.D., Knoxville

REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BYLAWS

John H. Burkhart, M.D., Knoxville, *Chairman* C. Eugene Jabbour, M.D., Memphis Charles E. Jordan, M.D., Cookeville

REFERENCE COMMITTEE A

Richard M. Pearson, M.D., Memphis, *Chairman* Hugh Green, M.D., Carthage Dow Strader, M.D., Bristol

REFERENCE COMMITTEE B

William B. Harwell Jr., M.D., Nashville, *Chairman* David R. Barnes, M.D., Chattanooga Arnold M. Drake, M.D., Memphis

REFERENCE COMMITTEE C

James Chris Fleming, M.D., *Chairman* Joseph B. Moon, M.D., Knoxville Wm. Joel Pedigo Jr., M.D., Clarksville

REFERENCE COMMITTEE D

Thomas R. Duncan, M.D., Columbia, *Chairman* Warren A. Alexander, M.D., Covington R. Donathan Ivey, M.D., Crossville

COMMITTEE TO ELECT OUTSTANDING PHYSICIAN OF THE YEAR

James T. Galyon, M.D., Memphis, *Chairman* John B. Thomison, M.D., Nashville William O. Miller, M.D., Knoxville

JUNE, 1991 271

Nominating Committees

As required in the Bylaws, the Board of Trustees appointed a Nominating Committee with representatives from each of the three grand divisions of the state. The speaker announced the committee members.

EAST TENNESSEE

Nat E. Hyder Jr., M.D., Johnson City Sam J. Williams III, M.D., Chattanooga David G. Gerkin, M.D., Knoxville

MIDDLE TENNESSEE

Will G. Quarles Jr., M.D., Livingston Wm. Joel Pedigo Jr., M.D., Clarksville William B. Harwell Jr., M.D., Nashville

WEST TENNESSEE

James T. Craig Jr., M.D., Jackson James Chris Fleming, M.D., Memphis Warren A. Alexander, M.D., Covington

ELECTION BY HOUSE OF DELEGATES APRIL 13, 1991

The preliminary report of the Nominating Committee was presented in the first session of the House of Delegates on Thursday, April 11, 1991. The final report of the Nominating Committee was presented on Saturday, April 13, 1991 at the closing session of the House. Nominees submitted by the committee were voted upon individually, and in each instance the speaker called for additional nominations from the floor. The following were elected.



Newly elected President-Elect Charles Edward Allen, M.D., Johnson City

President Elect—Charles Edward Allen, M.D., Johnson City Speaker—George H. Wood, M.D., Knoxville Vice-Speaker—Thurman L. Pedigo, M.D., McMinnville Vice-President (East Tennessee)
Clark E. Julius, M.D., Knoxville Vice-President (Middle Tennessee)
R. Gary Samples, M.D., Cookeville

Vice-President (West Tennessee) Ronald A. Homra, M.D., Jackson AMA Delegate (Middle Tennessee) John S. Derryberry, M.D., Shelbyville (January 1, 1992-December 31, 1993) AMA Alternate Delegate (Middle Tennessee) Thurman L. Pedigo, M.D., McMinnville (January 1, 1992-December 31, 1993) AMA Delegate (Middle Tennessee) John B. Thomison, M.D., Nashville (January 1, 1992-December 31, 1993) AMA Alternate Delegate (Middle Tennessee) Clarence R. Sanders, M.D., Gallatin (January 1, 1992-December 31, 1993) AMA Delegate (West Tennessee) Allen S. Edmonson, M.D., Memphis (January 1, 1992-December 31, 1993) AMA Alternate Delegate (West Tennessee) Hugh Francis Jr., M.D., Memphis (January 1, 1992-December 31, 1993) AMA Young Physician Section Delegate Paul D. Parsons, M.D., Franklin (April 13, 1991-April 11, 1992) AMA Young Physician Section Delegate Fred Ralston Jr., M.D., Fayetteville (April 13, 1991-April 11, 1992) AMA Young Physician Section Alternate Delegate Robert W. Herring Jr., M.D., Brentwood (April 13, 1991-April 11, 1992) AMA Young Physician Section Alternate Delegate William L. Hickerson, M.D., Memphis

TRUSTEES

Middle Tennessee: John W. Lamb, M.D., Nashville (1994)

(April 13, 1991-April 11, 1992)

COUNCILORS

Second District—Richard A. Brinner, M.D., Knoxville (1993) Fourth District—E. Morgan Dudney, M.D., Gainesboro (1993) Sixth District—Thomas C. Krueger, M.D., Springfield (1992) Eighth District—Michael A. McAdoo, M.D., Milan (1993) Tenth District—Hugh Francis Jr, M.D., Memphis (1993)

THE ABOVE WERE ELECTED BY THE HOUSE OF DELEGATES

AMENDMENTS TO THE CONSTITUTION AND BYLAWS

The speaker reported that there were two amendments to the Bylaws to be considered at this session by the House.

The proposed amendments to the Constitution and Bylaws are shown below, with proposed new language shown in **boldface** type and material to be deleted shown in *italics* and enclosed in brackets.

AMENDMENTS TO THE BYLAWS

BYLAW AMENDMENT NO. 1-91

Young Physician Membership on Standing Committees

Whereas, The young physician members of the Tennessee Medical Association are playing a greater role in its policymaking process; and

Whereas, The participation of young physicians is vital to the continued future, unity, and versatility of this Association; and

Whereas, The Board of Trustees has the responsibility under Bylaw Chapter VII, Sec. 8 (b) to appoint members of the standing committees in the event of vacancies; and

Whereas, The Board of Trustees is of the opinion that some standing committee membership, now limited by Bylaw requirements, could be better served if young physicians were appointed to those committees. Now, therefore be it

RESOLVED, That Chapter VII, Section 8 (b) of the Bylaws be amended as follows:

(b) The members of these standing committees shall be appointed by the Board of Trustees. The Board of Trustees, in its discretion, may create one additional slot for a member of the Young Physician Section on standing committees which may benefit therefrom . . .

REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BYLAWS—recommended nonadoption of Bylaw Amendment No. 1-91.

ACTION: NOT ADOPTED

BYLAW AMENDMENT NO. 2-91

Peer Review Due Process Procedures

Whereas, Upon receiving formal complaints by physicians, patients, and other persons against its members, the Tennessee Medical Association (TMA) conducts peer review in three different jurisdictional contexts: the Judicial Council (Bylaw Chapter VI, Section 4); the Peer Review Committee (Chapter VII, Section 14); and, by the component societies (Chapter XI, Sections 3-6); and

Whereas, Both Tennessee and federal law offer strong protection for good faith medical peer review in the form of comprehensive immunity from liability for all participants and witnesses which strongly discourages litigation; and

Whereas, This statutory immunity is available when good faith peer review action follows reasonable fact finding efforts, and when there is a reasonable belief that quality of care would be furthered; and

Whereas, The Health Care Quality Improvement Act (HCQIA) sets forth specific notice and procedural due process hearing requirements which TMA must, at a minimum, follow in order to ensure that its peer review participants retain continued immunity from liability; and

Whereas, The American Medical Association (AMA), through its recently published (HCQIA compliant) Grievance and Disciplinary Guidebook for medical societies, has offered to defend societies that apply its due process procedures for

peer review when enforcing the AMA's Current Opinions and Principles of Medical Ethics; and

Whereas, Current TMA Bylaw due process steps need to be brought more in line with the new AMA fair hearing and due process guidelines. Now, therefore be it

RESOLVED, That the Tennessee Medical Association Board of Trustees study and adapt as they deem appropriate those relevant sections of the American Medical Association's Grievance and Disciplinary Guidebook for incorporation into a peer review policy handbook for the Tennessee Medical Association; and be it further

RESOLVED, That the Tennessee Medical Association Board of Trustees include in the peer review policy handbook a separate section with grievance and disciplinary procedures which can be similarly adopted by component societies; and be it further

RESOLVED, That the Tennessee Medical Association Bylaws sections covering peer review be unified and amended as follows to incorporate by reference the policy handbook that the Board of Trustees promulgates at the conclusion of their study:

Chapter VI, Sec. 4 (a), delete the last two sentences which read:

[A member or component society against whom a charge is made shall be given fifteen days' written notice of the hearing and the charges against him or it. Such member or component society shall have the right to be represented by counsel and shall be entitled to a full and equitable hearing.]

Chapter VI, Sec. 4 (b), create a new subsection (b) to read as follows:

In the event the Judicial Council, any other Association entity, component society (on appeal), or committee thereof, shall pursue a peer review action, then the procedures to be followed will be those published by the Board of Trustees in the form of a policy handbook, and amended from time to time, to comply with legal requirements. The Board of Trustees shall draft the policy handbook in reference to the American Medical Association's extant grievance and disciplinary manual. Peer review action shall only be taken in good faith, when there is a reasonable belief that health care quality would be furthered, and after reasonable efforts have been made to obtain the facts of the case before professional review occurs. Once an action has been proposed, the member physician (or other entity as the case may be) under review shall be provided all notice and hearing rights set forth in the policy handbook as promulgated by the Board of Trustees.

Chapter VI, Sec. 4 (b)-(e), shall be relettered (c)-(f).

Chapter VII, Sec. 14, shall be amended to include the following text at the end of the section:

If the Peer Review Committee determines that a professional review action is warranted, either as a direct appeal or as an original action, it shall follow the notice and due process procedures set forth above in Bylaw Chapter VI, Section 4 (b).

Chapter XI, Sec. 5, shall be amended by insertion of the following text at the beginning of the section:

Component societies are empowered to conduct peer review of their members, and shall have original jurisdiction to review peer review complaints. When a component society determines that a professional review action is warranted, it shall follow the notice requirements and due process procedures which substantially comply with the policy handbook referenced in Bylaw Chapter VI, Section 4 (b). Appeals may be perfected and filed with the Judicial

Council within thirty days of the component society's final decision on the matter.

Chapter XI, Sec. 6, shall be amended in the last sentence as follows:

Hearings will be conducted as set forth in Chapter VI, Section 3 and Section 4 (b) of these Bylaws.

REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BYLAWS—recommended adoption of Bylaw Amendment No. 2-91.

ACTION: ADOPTED

RESOLVED, That the Tennessee Medical Association recommend that riding schools, horse shows, rodeos, and other equestrian events be urged to require that protective head gear be worn during such activities; and be it further

RESOLVED, That a copy of this resolution be distributed to the state 4-H Extension Specialists, and other organizations that are concerned with horseback riding; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE B—recommended adoption of Resolution No. 1-91.

ACTION: ADOPTED

RESOLUTIONS

The reference committees have the option of recommending a resolution for adoption or rejection, for adoption as amended or substituted, for referral, or for no action. The resolutions that follow are in the form in which they were **adopted**, **not adopted**, or **referred** by the House of Delegates. Resolution No. 13-91 was withdrawn.

RESOLUTION NO. 1-91

Reaffirmation of Resolution No. 1-84 (Protective Head Gear for Horseback Riders)

By: Rex A. Amonette, M.D., Chairman TMA Board of Trustees

Whereas, Resolution No. 1-84 titled "Protective Head Gear for Horseback Riders" will sunset at this annual meeting unless reaffirmed by this House of Delegates; and

Whereas, It is the opinion of the Board of Trustees that horseback riding accidents remain a leading cause of injuries from recreational activities; and

Whereas, According to the Centers for Disease Control (CDC), horseback riders are estimated to suffer more serious injuries per hour of riding than motorcyclists and race-car drivers; and

Whereas, The same report estimates that falls account for most horseback riding-associated injuries, yet a recent study showed that fewer than 20% of riders had worn a helmet at the time of the fall; and

Whereas, It is the opinion of CDC that a hard shell helmet lined with expanded polystyrene or a similar material would be most helpful in reducing such injuries. Now, therefore be it

RESOLVED, That the Tennessee Medical Association reaffirm the intent of Resolution No. 1-84 and recommend that educational programs be given to parents, riding instructors, show organizers, and managers outlining the risks of horseback riding and methods to minimize them; and be it further

RESOLVED, That the Tennessee Medical Association recommend that satisfactory protective head gear, such as those recommended by the United States Pony Clubs, be selected for each type of riding activity and worn when riding or preparing to ride; and be it further

RESOLUTION NO. 2-91

Reaffirmation of Resolution No. 8-84 (Mandatory Second Surgical Opinions)

BY: REX A. AMONETTE, M.D., CHAIRMAN TMA BOARD OF TRUSTEES

Whereas, Resolution No. 8-84 adopted by the House of Delegates calls for the Tennessee Medical Association's opposition to mandatory second surgical opinions; and

Whereas, The American Medical Association and the Tennessee Medical Association continue to oppose programs that require second surgical opinions. Now, therefore be it

RESOLVED, That the Tennessee Medical Association continue its opposition to mandatory second opinions whether they be imposed by private insurance companies or by federal and state funded programs; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior to thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE D—recommended adoption of Resolution No. 2-91.

ACTION: ADOPTED

RESOLUTION NO. 3-91

Reaffirmation of Resolution No. 3-84 (Penalties for Hunting While Under the Influence of Alcohol or Drugs)

By: Rex A. Amonette, M.D., Chairman TMA Board of Trustees

Whereas, Resolution No. 3-84 adopted by the House of Delegates supported legislation that would impose penalties and sentences for hunters judged to be hunting while under the influence of alcohol and drugs; and

Whereas, There continue to be a number of hunters who hunt while under the influence of alcohol or drugs; and

Whereas, Hunting as a sport in Tennessee continues to be

popularized and the number of individuals participating is on the increase. Now, therefore be it

RESOLVED, That the Tennessee Medical Association through its Legislative Committee seek passage of a state law imposing penalties and sentences on hunters judged to be hunting while under the influence of alcohol or drugs; and be it further

RESOLVED, That the determining criteria of a hunter being under the influence be the same as that used for DUI offenders; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE B—recommended adoption of Resolution No. 3-91

ACTION: ADOPTED

SUBSTITUTE RESOLUTION NO. 4-91

Reaffirmation of Resolution No. 10-84 (Physician Supervision of Nurse Practitioners)

By: Rex A. Amonette, M.D., Chairman TMA Board of Trustees

Whereas, Resolution No. 10-84 titled "Physician Supervision of Nurse Practitioners" will sunset at this annual meeting unless reaffirmed by this House of Delegates; and

Whereas, Tennessee Code Annotated § 63-6-204 in defining the "practice of medicine" states that "nothing in this chapter shall be so construed as to prohibit service rendered by a physician assistant, registered nurse, or a licensed practical nurse, if such service is rendered under the supervision, control, and responsibility of a licensed physician"; and

Whereas, The rules and regulations promulgated by the Board of Medical Examiners concerning a nurse practitioner/prescription writer require that "supervising physician shall make a personal review of historical, physical, and therapeutic data of all patients and their condition as often as medically indicated but at least every seven days . . . "; and

Whereas, It is the opinion of the Board of Trustees that physician supervision of nurse practitioners still should be required on a daily basis in acute care clinics. Now, therefore he it

RESOLVED, That the Tennessee Medical Association reaffirm Resolution No. 10-84 and recommend that the phrase "as often as medically indicated" as stated in the rules and regulations of the Board of Medical Examiners regarding supervision of nurse practitioners be defined as daily visits by the physician when the illnesses are acute (such as febrile illnesses in children) in those clinics where on-site supervision is not feasible; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE D—recommended adoption of Substitute Resolution No. 4-91.

ACTION: ADOPTED

RESOLUTION NO. 5-91

Reaffirmation of Resolution No. 11-84 (Insurance Coverage)

BY: REX A. AMONETTE, M.D., CHAIRMAN TMA BOARD OF TRUSTEES

Whereas, Resolution No. 11-84 will sunset at this annual meeting unless reaffirmed by this House of Delegates; and

Whereas, It is the opinion of the Board of Trustees that the intent of this resolution should be reaffirmed. Now, therefore be it

RESOLVED, That the Tennessee Medical Association encourage insurance companies to develop in all of their policies reimbursement procedures designed to: (1) cover surgical or medical procedures and attendant costs in a physician's office that are covered in the emergency room or inpatient setting at an equal or higher rate to encourage less costly office care, (2) be a comprehensive approach with copayment, (3) encourage outpatient care by having lower deductibles and lower copayments as compared with inpatient and emergency room coverage, (4) encourage preventive health and programs such as well child checkups and immunizations, and (5) encourage ambulatory surgery in a hospital or physician's office; and be it further

RESOLVED, That the Tennessee Medical Association work closely with patients, patient groups, insurance groups, and industrial groups to publicize and endorse policies that contain these concepts; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE C—recommended adoption of Resolution No. 5-91.

ACTION: ADOPTED

RESOLUTION NO. 6-91

Reaffirmation of Resolution No. 15-84 (Cost Control of Medical Services)

By: Rex A. Amonette, M.D., Chairman TMA Board of Trustees

Whereas, There is a clear relationship between the issue of physician taxation and rising medical costs; and

Whereas, Resolution No. 15-84 entitled "Cost Control of Medical Services" was adopted by the House of Delegates and continues to be a very useful and appropriate statement of the views of physicians regarding the issue of taxation; and

Whereas, Resolution No. 15-84 will sunset at this annual meeting unless reaffirmed by this House of Delegates. Now, therefore be it

RESOLVED, That the Tennessee Medical Association oppose discriminatory taxes aimed toward the medical profession that tend to increase the cost of medical care; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE B—recommended adoption of Resolution No. 6-91.

ACTION: ADOPTED

RESOLUTION NO. 7-91

Reaffirmation of Resolution No. 18-84 (Malpractice Insurance)

By: Rex A. Amonette, M.D., Chairman TMA Board of Trustees

Whereas, Resolution No. 18-84, "Malpractice Insurance," will sunset at this annual meeting unless reaffirmed by this House of Delegates; and

Whereas, Malpractice insurance continues to be of extreme importance to physicians both in terms of cost and coverage; and

Whereas, State Volunteer Mutual Insurance Company, the physician owned and operated company established by the House of Delegates in 1975, continues to deserve the full support of all physicians and the Tennessee Medical Association. Now, therefore be it

RESOLVED, That this House of Delegates reaffirm its appreciation of the tremendous effort required to establish and maintain a sound professional liability insurance company, the outstanding manner in which all aspects of State Volunteer Mutual Insurance Company's service and protection have been carried out, and the desire that State Volunteer Mutual Insurance Company continue to receive the wholehearted backing and support of all component societies and physicians of Tennessee: and be it further

RESOLVED, That the Tennessee Medical Association continue with efforts to educate all members in matters related to malpractice insurance, both past and present, in Tennessee; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE D—recommended adoption of Resolution No. 7-91.

ACTION: ADOPTED

RESOLUTION NO. 8-91

Swimming Safety

By: Hays Mitchell, M.D., President
TN Chapter, American Academy of Pediatrics
Tennessee Pediatric Society

Whereas, Drowning has become the third leading cause of death in children aged 0-4 years, and has become the leading cause of death in this age group in states with a high prevalence of swimming pools such as Florida, Arizona, and California; and

Whereas, Near drowning is estimated to be responsible for 7,100 hospital admissions and 28,000 emergency room admissions by 1986 statistics; and

Whereas, The annual direct cost for childhood drowning is estimated to exceed \$200 million; and

Whereas, Up to 90% of drowning in the under 5-year age group occurs in residential pools; and

Whereas, It has been shown that adequate fencing and swim instruction will increase the safety of pools and increase the awareness of those owning and using them; and

Whereas, Careful instructions and supervision of infants and children can prevent water intoxication; and

Whereas, It is highly desirous for us as concerned physicians to impact on this leading cause of injury and death in children. Now, therefore be it

RESOLVED, That the Tennessee Medical Association go on record as strongly supporting barrier fencing around residential pools, early water safety, and water awareness programs; and be it further

RESOLVED, That the Tennessee Medical Association petition the American Medical Association and the American Academy of Pediatrics to demonstrate state and national support for a similar resolution; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE B—recommended adoption of Resolution No. 8-91 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 9-91

Physician Malpractice Protection as "State Employees" When Treating Medicaid Patients

BY: HAYS MITCHELL, M.D., PRESIDENT
TN CHAPTER, AMERICAN ACADEMY OF PEDIATRICS
TENNESSEE PEDIATRIC SOCIETY AND
BRADLEY COUNTY MEDICAL SOCIETY, DELEGATE

Whereas, The Community Health Agency Act of 1989, Section 15, provides that "designated volunteers" providing direct health care for indigent patients shall be considered "state employees" for the category of "professional malpractice" pursuant to Tennessee Code Annotated § 9-8-307; and

Whereas, This in effect results in the indigent patient suing the state, not the physician, and for a maximum amount of \$300,000; and

Whereas, The Omnibus Budget Reconciliation Act of 1989 (OBRA) requires states to make eligible for Medicaid all pregnant women and children up to 6 years of age whose incomes are under 133% of the federal poverty level; and

Whereas, Tennessee has increased Medicaid eligibility of pregnant women and children up to 1 year of age up to 150% of the federal poverty level; and

Whereas, OBRA 1989 requires that the states demonstrate that Medicaid patients have provider accessibility equal to that of any other patient; and

Whereas, Despite 70% funding of Medicaid reimbursement by the federal government, Tennessee has fiscal difficulty providing the 30% of funding necessary to maintain an adequate physician provider base; and

Whereas, Malpractice considerations prevent many physicians from participating fully in the Medicaid program; and

Whereas, The Tennessee Medical Association is dedicated

to providing access to quality medical care for all Tennesseeans. Now, therefore be it

RESOLVED. That the Legislative Committee of the Tennessee Medical Association be instructed to pursue legislation that would treat medical professionals providing health care for Medicaid patients as "state employees" for the category of "professional malpractice" pursuant to Tennessee Code Annotated § 9-8-307; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE A—recommended adoption of Resolution No. 9-91 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 10-91

Requiring Cardiopulmonary Resuscitation (CPR) and First Aid Training of Teachers During the License Certification and Renewal Processes

BY: WM. JOEL PEDIGO JR., M.D.
MONTGOMERY COUNTY MEDICAL SOCIETY AND
TENNESSEE PEDIATRIC SOCIETY

Whereas, Over the course of the years 1988 and 1989 forty-four school aged children in the state of Tennessee died because of accidents ranging from foreign body airway obstructions to drowning; and

Whereas, The vast majority of such accidental deaths could have been prevented by adults intervening using CPR, airway obstruction management, and other first aid techniques; and

Whereas, Although Tennessee teachers spend a great deal of time with young people in the 5- to 18-year age group, current license certification and renewal regulations neither require nor even mention CPR and other first aid training for continuing education purposes; and

Whereas, If such training were offered and required of teachers by the Tennessee Department of Education, successful first aid intervention would be available immediately to students who would otherwise die accidentally. Now, therefore be it

RESOLVED, That the Tennessee Medical Association work with and petition the Tennessee Department of Education to promulgate regulations requiring that cardiopulmonary resuscitation and other first aid training techniques be included in the licensure certification and renewal processes of Tennessee's teachers and school bus drivers; and be it further

RESOLVED, That if the efforts with the Tennessee Department of Education for the promulgation of such regulations is deemed ineffective by the Board of Trustees, then the Tennessee Medical Association shall lobby the General Assembly for a statute that requires the implementation of cardiopulmonary resuscitation and first aid training for Tennessee's teachers and school bus drivers; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE B—recommended nonadoption of Resolution No. 10-91.

ACTION: NOT ADOPTED

RESOLUTION NO. 11-91

Inequitable Medicaid Payment for Obstetrical Services

By: Douglas Carpenter, M.D., President Monroe County Medical Society

Whereas, A physician, board-certified in family practice, is required to perform to the same standards as the board-certified obstetrician for spontaneous vaginal delivery, predelivery care, and post-delivery care; and

Whereas, Every effort should be made to address the critical shortage of physicians willing to accept obstetrical patients under Medicaid. Now, therefore be it

RESOLVED, That the Tennessee Medical Association seek to correct the unfair policy whereby the Tennessee Medicaid program reimburses family physicians at a lower rate than obstetricians for the same services; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE A—recommended adoption of Resolution No. 11-91 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 12-91

Use of Corporal Punishment in Tennessee Schools

BY: HAYS MITCHELL, M.D.
TN CHAPTER, AMERICAN ACADEMY OF PEDIATRICS
TENNESSEE PEDIATRIC SOCIETY

Whereas, As physicians we dedicate ourselves to promoting and protecting the physical and psychological health of the children of Tennessee; and

Whereas, Children suffer physical, psychological, and emotional injury as a result of corporal punishment; and

Whereas, The American Academy of Pediatrics and the American Medical Association as well as the American Psychological Association, the American Bar Association, the National Education Association, and the National Parent Teacher Association all favor the abolition of corporal punishment in schools; and

Whereas. Corporal punishment is unnecessary, and strong and effective alternative methods of discipline exist and are already used by the majority of educators. Now, therefore be it

RESOLVED, That the Tennessee Medical Association oppose the use of corporal punishment in Tennessee schools; and be it further

RESOLVED, That the Tennessee Medical Association strongly urge the Tennessee General Assembly to repeal the corporal punishment statute set forth in Tennessee Code Annotated § 49-6-4101 to § 49-6-4105; and be it further

RESOLVED, That the Tennessee Medical Association assist educators with the implementation of alternative methods of discipline in schools; and be it further

RESOLVED, That the Tennessee Medical Association urge its component societies to address the issues of corporal punishment with their local school districts and to urge and support the development of alternative means of discipline; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE B—recommended adoption of Resolution No. 12-91 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 14-91

Membership for Osteopaths

BY: JAMES CHRIS FLEMING, M.D., PRESIDENT MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Whereas, The American Medical Association accepts for active membership a person who possesses the degree of doctor of medicine or its equivalent or who possesses an unrestricted license to practice medicine and surgery; and

Whereas, Forty-six state medical associations accept osteopathic physicians for general membership; and

Whereas, Component medical societies of the Tennessee Medical Association are authorized to establish an affiliate membership category for health professionals other than physicians; and

Whereas, The Constitution of the Tennessee Medical Association defines "physician" as a person who, having been regularly admitted to a medical school duly recognized in the country in which it is located, has successfully completed the prescribed course of studies in medicine, and has acquired the requisite qualifications to be legally licensed to practice medicine; and

Whereas, Tennessee Code Annotated repeatedly defines "physician" as a person licensed to practice medicine or osteopathy. Now, therefore be it

RESOLVED, That the Tennessee Medical Association Constitution and Bylaws be amended to provide that doctors of osteopathy be eligible for Tennessee Medical Association membership provided they have completed an Accreditation Council of Graduate Medical Education accredited internship or residency program or an equivalent program recognized by the American Osteopathic Association leading to allopathic or osteopathic specialty board eligibility or certification; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BYLAWS—recommended nonadoption of Resolution No. 14-91.

ACTION: NOT ADOPTED

RESOLUTION NO. 15-91

Donation of Unserved Food

BY: CHARLES W. WHITE, M.D.
CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

Whereas, The annual meeting of the Tennessee Medical Association occurs in one of three major municipalities of Tennessee: and

Whereas, There are many homeless and hungry people in these municipalities; and

Whereas, There is frequently some food prepared but not served at the social functions of the Tennessee Medical Association. Now, therefore be it

RESOLVED, That the Tennessee Medical Association Board of Trustees investigate the possibility that unserved food prepared for Tennessee Medical Association's annual meeting social functions be donated to an appropriate organization which could use this food effectively to relieve the hunger found in the municipalities in Tennessee where the annual meetings are held; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE B—recommended adoption of Resolution No. 15-91.

ACTION: ADOPTED

RESOLUTION NO. 16-91

Human Immunodeficiency Virus (HIV) Infection Reporting

BY: JOHN W. LAMB, M.D. NASHVILLE ACADEMY OF MEDICINE

Whereas, Acquired immunodeficiency syndrome (AIDS) is a lethal infectious disease which has already killed 100,000 people and is expected to cause 70,000 or more deaths per year for each of the next three years; and

Whereas, Transmission from health care workers to patients has already been accepted as a probability by the Centers for Disease Control; and

Whereas, Transmission from infected patients to health care workers is generally regarded as being more likely than the reverse; and

Whereas, Transmission of the disease is still possible even when the infected person is apparently in good health; and

Whereas, Knowledge will contribute to education which can protect uninfected persons. Now, therefore be it

RESOLVED, That the Tennessee Medical Association urgently request the Tennessee Department of Health and Environment and/or the Tennessee General Assembly to declare human immunodeficiency virus infection a reportable disease; and be it further

RESOLVED, That every effort be made when reporting human immunodeficiency virus infection to protect confidentiality and prevent discrimination while appropriate steps are taken to protect the public health and prevent the spread of disease; and be it further

RESOLVED, That the Tennessee Medical Association urge Tennesseans in high-risk situations to be tested so that behavior may be modified in order that transmission of human immunodeficiency virus infection can be prevented; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE A—recommended adoption of Resolution No. 16-91 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 17-91

Physician Delegation of Prescription Issuance Authority to Certified Physician Assistants

By: Otis W. Jones, M.D., Delegate Roane-Anderson County Medical Society

Whereas, Tennessee physicians have the legal authority to utilize certified physician assistants (PAs) in providing medical services in their practices but the present statute does not contain a provision for PAs to issue prescriptions under physician supervision; and

Whereas, In a recent survey, 118 physicians (90% of the respondents) who supervise PAs indicated they want to have Tennessee law amended to allow a licensed physician to delegate to a certified PA functioning in a dependent manner the authority to issue prescriptions; and

Whereas, Twenty-eight states, the military, the Veterans Administration, and the US Public Health Service presently allow a physician to delegate to a certified PA functioning under supervision the issuing of prescriptions; and

Whereas, PAs' two-year educational programs are accredited by the Council on Allied Health Education and Accreditation of the American Medical Association, are comprehensive, follow a medical training format, with academic courses in the basic medical sciences (including a 3-4 academic quarter hour course in pharmacology), include clinical rotations taught by physicians, and 87% of entering students already possess a bachelor's degree with a majority having previous health care experience, and most programs grant a bachelor's degree upon completion; and

Whereas, PAs must meet stringent certification standards including passing a national certification examination developed by the National Board of Medical Examiners (which includes testing knowledge of pharmacology), completing 100 hours of continuing medical education every two years (which includes updates on pharmacotherapeutics), and taking a recertification examination every six years; and

Whereas, Because of the content, quality, and format of PA educational programs and certification, no state or federal entity requires a PA to have a master's degree in order to issue prescriptions under physician supervision; and

Whereas, Tennessee statute clearly stipulates that PAs may provide medical services only under the supervision, control, and responsibility of a licensed physician who is accountable to the state Board of Medical Examiners (BME) and that PAs are reviewed and regulated by the BME Committee on Physician Assistants; and

Whereas, The American Academy of Physician Assistants has maintained an official policy for 25 years that PAs should

not practice independently of physician supervision, PA program applicant screening, role education and clinical training emphasize the physician-dependent nature of PA practice, and no state or federal entity allows independent practice by PAs. Now, therefore be it

RESOLVED, That the Tennessee Medical Association support a statutory change that would allow a licensed physician to delegate prescription issuing authority to a certified physician assistant under his/her supervision, control, and responsibility based upon a written protocol specifying medication types and limitations previously filed with, and approved by, the Board of Medical Examiners and its Committee on Physician Assistants; and be it further

RESOLVED, That the Tennessee Medical Association support a statutory change allowing a physician to delegate prescription issuing authority to his/her physician assistant only if the amendment specifically prohibits physician assistants from engaging in the independent practice of medicine and from issuing prescriptions beyond the scope of written protocols developed and approved by the Board of Medical Examiners; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE A—recommended nonadoption of Resolution No. 17-91.

ACTION: NOT ADOPTED

RESOLUTION NO. 18-91

Training Criteria for New Procedures

BY: HAYS MITCHELL, M.D.
TMA COMMITTEE ON GOVERNMENTAL MEDICAL SERVICES

Whereas, Rapid advances in technology have made new surgical techniques possible; and

Whereas, Procedures such as laparoscopic cholecystectomy have now become commonplace; and

Whereas, Utilization of certain innovative surgical techniques can dramatically shorten hospital stays and reduce patient recovery time; and

Whereas, Such innovations in medicine should be encouraged; and

Whereas, Medicare and other third party insurers have begun to establish training requirements; and

Whereas, Hospital medical staffs and governing boards have traditionally established training requirements; and

Whereas, A myriad of conflicting requirements by different third party payors will vastly complicate reimbursement as well as limit access to such procedures for patients. Now, therefore be it

RESOLVED, That the Tennessee Medical Association support the position that training criteria for new procedures be the exclusive province of the hospital or ambulatory surgical treatment center medical staff and that Medicare and other third party payors should not seek to impose arbitrary credentialling requirements; and be it further

RESOLVED, That the Tennessee Medical Association, through its Committee on Governmental Medical Services and other means, work with Medicare and other insurers to end the

practice of imposing arbitrary credentialling requirements; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE C—recommended adoption of Resolution No. 18-91.

ACTION: ADOPTED

RESOLUTION NO. 19-91

TMA Funding of Medical Students to AMA Conventions

By: Glenn D. Crater, Student Delegate Memphis-Shelby County Medical Society

Whereas, The Medical Student Section (MSS) of the Tennessee Medical Association (TMA) is an integral part of the decision making process of the TMA and the American Medical Association (AMA); and

Whereas, The MSS provides an opportunity for students to become involved in organized medicine at an early age and to take part in the formation of medical policy; and

Whereas, The medical students attending schools in Tennessee join the TMA through their component medical societies and provide the dues paying members of the TMA for the future; and

Whereas, It is important to provide students with every opportunity to further their education and leadership skills, and the AMA-MSS national meetings provide an excellent opportunity to introduce students to the skills they need to address the issues and problems that do and will face the medical profession both now and in the future; and

Whereas, The budgets of students, student organizations, and component medical societies are severely limited and can provide only limited opportunities for attendance at these important meetings. Now, therefore be it

RESOLVED, That the Tennessee Medical Association annually budget a stipend of not more than \$2,000 for each of its component medical societies with active medical student sections to provide an opportunity for the leaders of those schools' medical student sections to attend the American Medical Association Medical Student Section annual and interim meetings and the American Medical Association annual leadership conference; and be it further

RESOLVED, That delegates eligible for stipends would be from medical student sections in which at least 50% of the student body are members of the Tennessee Medical Association; and be it further

RESOLVED, That students interested in obtaining stipends to American Medical Association meetings must be members of the Tennessee Medical Association and must apply to their component medical society at least two months before the American Medical Association Medical Student Section national meetings by writing a letter of intent to their component medical society indicating their position within the Tennessee Medical Association Medical Student Section and their activities in the Tennessee Medical Association Medical Student Section in the past; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE C—recommended adoption of Resolution No. 19-91 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 20-91

Home Health Nursing Case Management

BY: MICHAEL A. MCADOO, M.D. TENNESSEE ACADEMY OF FAMILY PHYSICIANS

Whereas, Many patients in Tennessee are immobile and thus "homebound"; and

Whereas, Many families desire assistance in caring for family members in a cost-effective method at home; and

Whereas, Numerous home health agencies have been created to assist with this need; and

Whereas, Medicare/Medicaid guidelines specifically state that the patient must be declared homebound by the attending physician; and

Whereas, The above-mentioned treatment plan requires physician attention and interaction to respond to changing medical needs including: new treatment plans, diagnostic laboratory orders, interpretation of laboratory data, and rendering of appropriate medical treatment, which is a very time-consuming process; and

Whereas, Appropriate Current Procedural Terminology (CPT) codes for case management services have been developed. Now, therefore be it

RESOLVED, That the Tennessee Medical Association request that fees for appropriate case management of homebound nursing patients be appropriately reimbursed to Tennessee physicians by Medicare/Medicaid and other significant third party insurance companies doing business in Tennessee; and be it further

RESOLVED, That a copy of this resolution be distributed to the medical director of Equicor Medicare Administration, medical director and commissioner of the Medicaid Administration of the State of Tennessee, and other medical directors of significant third party insurers doing business in Tennessee; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE D—recommended adoption of Resolution No. 20-91.

ACTION: ADOPTED

RESOLUTION NO. 21-91

Laser Surgery Policy

By: David G. Gerkin, M.D., Delegate Knoxville Academy of Medicine

Whereas, The newest surgical devices utilized by surgeons are lasers; and

Whereas, Lasers use extremely high energy light waves to cut, coagulate, and remove tissue; and

Whereas, With any surgical procedure the key to a successful outcome is a knowledgeable, experienced, and skillful surgeon; and

Whereas, The surgeon who uses lasers should understand the technology being employed, be well trained in its use, be capable of managing potential complications, and be able to meet the high standards of his medical peers. Now, therefore be it

RESOLVED, That the Tennessee Medical Association adopt a policy that laser surgery should be performed only by individuals licensed to practice medicine and surgery or by those categories of practitioners licensed by the state to perform surgical services; and be it further

RESOLVED, That the Tennessee Medical Association petition the Tennessee General Assembly, if and when necessary, to limit laser surgery to only those practitioners licensed to practice medicine and surgery; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE C—recommended adoption of Resolution No. 21-91.

ACTION: REFERRED TO TMA BOARD OF TRUSTEES

RESOLUTION NO. 22-91

Recourse by Physicians in Appeals of Unfavorable Audits and Sanctions by Equicor

By: Jerome F. McKenzie, M.D., Delegate Knoxville Academy of Medicine

Whereas, There seems to be a conflict of interest involving those parties working for Equicor and conducting "fair hearings" for those physicians who are audited and sanctioned; and

Whereas, The real purpose for these hearings is to provide an unbiased and impartial review of the evidence; and

Whereas, The reputation and integrity of said physicians are being impugned without the recourse of an appeal. Now, therefore be it

RESOLVED, That the Tennessee Medical Association support the position that any physician who has an unfavorable outcome of "fair hearing" conducted by Equicor should have recourse for appeal to federal court regardless of amount of fine; and be it further

RESOLVED, That the Tennessee Medical Association support the repeal of the Medicare law that currently restricts appeals of fines to amounts only exceeding \$500; and be it further

RESOLVED, That a similar resolution be introduced into the American Medical Association House of Delegates by the Tennessee delegation; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE A—recommended adoption of Resolution No. 22-91 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 23-91

Credentials and Qualifications of Reviewers From PRO and Medicare

By: Jerome F. McKenzie, M.D., Delegate Knoxville Academy of Medicine

Whereas, The actions of reviewers for the Medicare carrier and the peer review organization (PRO) of the state of Tennessee have considerable potential for negative impact on physicians and thus on medical care; and

Whereas, The task of peer review is difficult because of the specialization and complicated nature of the various medical specialties; and

Whereas, The qualifications of reviewers should be known by those physicians being examined; and

Whereas, The Tennessee Medical Association should be consulted regarding the establishment of a list of reviewers who have adequate qualifications. Now, therefore be it

RESOLVED, That the Tennessee Medical Association support the position that before peer review is performed, the credentials and background of Medicare reviewers be made known to the Tennessee Medical Association and to those physicians being examined before the review is performed; and be it further

RESOLVED, That the Tennessee Medical Association support passage of legislation which would guarantee that credentials of Medicare and peer review organization reviewers be made known before peer review is performed; and be it further

RESOLVED, That a similar resolution by introduced into the American Medical Association House of Delegates by the Tennessee delegation; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE A—recommended adoption of Resolution No. 23-91 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 24-91

Physician Access to Medicare Screening Standards

By: Jerome F. McKenzie, M.D., Delegate Knoxville Academy of Medicine

Whereas, The establishing of quality screens by Medicare should be representative of the accepted standard of care of each discipline involved; and

Whereas, It is impossible for physicians to adequately document for audits if they do not know what items are required; and

Whereas, It is necessary to adequately document to be able to prove appropriateness and proper coding of services; and

Whereas, These screens seem to have no basis in the common practice of medicine or the standard of care; and

Whereas, These screens seem to be absent from any standard reference book of medicine or coding; and

Whereas, The basic premise of fairness and equity seems to be lacking in the formulation of such screens. Now, therefore be it RESOLVED, That the Tennessee Medical Association support legislation or regulations requiring that Medicare carriers, prior to the implementation of quality screens, disseminate such screens to all physicians according to listing and educational process (other than by audit); and be it further

RESOLVED, That the Tennessee Medical Association support efforts to obtain quality screens employed by Medicare carriers so that physicians may adequately document to ensure protection from Medicare intermediary post facto audits; and be it further

RESOLVED, That a similar resolution be introduced into the American Medical Association House of Delegates by the Tennessee delegation; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE A—recommended adoption of Resolution No. 24-91 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 25-91

Board of Trustees Composition and Elections

By: Rex A. Amonette, M.D., Chairman TMA Board of Trustees

Whereas, The Tennessee Medical Association Board of Trustees is composed of the five officers of the Association and nine elected trustees, three from each grand division of the state: and

Whereas, For the past several years the nine trustees from the grand divisions have been elected in a sequence of four in one year, four the following year, and only one the next year with Middle Tennessee the only grand division electing a trustee annually; and

Whereas, It is desirable that there be a more equitable turnover on the Board of Trustees by electing three new members of the Board each year, one from each grand division, in order to provide continuity and enhance the Board's organization and operation; and

Whereas, The Constitution and Bylaws do not address how many Board of Trustees members are to be elected each year; and

Whereas, The current inequity could be corrected by the House of Delegates on a one-time basis over the next two years if it desires to do so. Now, therefore be it

RESOLVED, That in 1992, one trustee from East and West Tennessee be elected for three-year terms and one trustee from East Tennessee be elected for a four-year term; and be it further

RESOLVED, That in 1993 one trustee from West Tennessee be elected for a three-year term and one trustee from East and West Tennessee be elected for four-year terms; and be it further

RESOLVED, That the election of Board of Trustee members from Middle Tennessee not be modified since they currently elect one new member each year.

REFERENCE COMMITTEE C—recommended adoption of Resolution No. 25-91.

ACTION: ADOPTED

RESOLUTION NO. 26-91

Workers' Compensation Insurance Carriers

BY: CHARLES E. ALLEN, M.D., PRESIDENT
WASHINGTON-UNICOI-JOHNSON COUNTY MEDICAL ASSOCIATION

Whereas, Workers' compensation insurance carriers have increasingly cut the fees for medical services in workers' compensation care cases; and

Whereas, This action by the insurance carriers appears to be arbitrary, capricious, and designed simply to save the company money in spite of the legitimacy of claims filed by the insured client and beneficiary; and

Whereas, The State of Tennessee has not established a fee schedule for physicians' services in workers' compensation cases. Now, therefore be it

RESOLVED, That the Tennessee Medical Association, through official channels, request the State Attorney General's

COMMENDATION RESOLUTION

Memorial to Danny Thomas (Founder of St. Jude Children's Research Hospital, Memphis, Tennessee)

BY: C. EUGENE JABBOUR, M.D. FOR THE MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Whereas, Amos Jacobs, who was known and loved throughout this country as Danny Thomas, left his earthly home February 6, 1991, and now surely has received his just reward for all his good deeds; and

Whereas, In death, his life becomes even more amazing by virtue of his founding St. Jude Children's Research Hospital in 1962, an institution which has contributed immeasurably to the cure and alleviation of suffering of children with catastrophic illness, notably childhood leukemia; and

Whereas, This son of immigrant Lebanese parents was held in highest esteem by all Americans and by people throughout the world; and

Whereas, It is fitting and proper for the Tennessee Medical Association to honor him for his magnificent accomplishments in the care of our most precious resource, our children; and

Whereas, He was an honorary member of the Memphis-Shelby County Medical Society. Now, therefore be it

RESOLVED, That the Tennessee Medical Association present a copy of this resolution, including the inscription that follows, to the family of Danny Thomas and to St. Jude Children's Research Hospital:

In memory of Danny Thomas. He had a dream and made a promise to Saint Jude, the patron saint of hopeless causes. That dream became a reality, Saint Jude Children's Research Hospital, an institution which has and will continue to restore hope and life to thousands of children throughout the world. opinion about the legality of insurance carriers setting fees for services provided in workers' compensation cases and, if determined illegal, request corrective action; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE D—recommended adoption of Resolution No. 26-91 as amended.

ACTION: ADOPTED AS AMENDED

RESOLUTION NO. 27-91

Insurance Carriers' Disruption of the Physician/Patient Relationship

BY: CHARLES E. ALLEN, M.D., PRESIDENT
WASHINGTON-UNICOI-JOHNSON COUNTY MEDICAL ASSOCIATION

Whereas, Insurance carriers are acting in an arbitrary and capricious manner, which is designed simply to save them money in spite of the legitimacy of the claims filed by and on behalf of their clients and beneficiaries; and

Whereas, Insurance carriers are categorically challenging

COMMENDATION RESOLUTION

James C. Prose, M.D.

By: Rex A. Amonette, M.D., Chairman TMA Board of Trustees

Whereas, James C. Prose, M.D., has devoted 24 years of service to the Tennessee Medical Association as a member of the Committee on Emergency Medical Services; and

Whereas, Under his leadership as chairman, legislation was drafted and enacted into law establishing the Tennessee Division of Emergency Medical Services, which has become a model plan for other states; and

Whereas, Through his efforts as chairman of the Committee on Emergency Medical Services he vigorously promoted the establishment of a statewide emergency medical services system which is now a reality; and

Whereas, James C. Prose, M.D., will retire as chairman and member of the Committee on Emergency Medical Services at this annual meeting. Now, therefore be it

RESOLVED, That the Tennessee Medical Association commend James C. Prose, M.D., for his many years of dedicated faithful service and outstanding leadership to this Association; and be it further

RESOLVED, That a copy of this resolution, appropriately engrossed, be presented to James C. Prose, M.D.

the reasonableness and necessity of medical fees and services without justification; and

Whereas, The definitions and sources of this information remain undefined and ethereal despite repeated explanatory requests by members of the medical profession; and

Whereas, In the judgment of the medical profession the setting of these so-called reasonable fees by insurance carriers amounts to price fixing and therefore is impermissible under applicable antitrust laws; and

Whereas, Recently at least one insurance carrier has informed patients that it would assist in any legal action taken by a physician to recoup the balance of a fee that had been charged; and

Whereas, We strongly suspect that the insurance carriers may be overstepping what is ethically and legally proper in a variety of other ways. Now, therefore be it

RESOLVED, That the Tennessee Medical Association exercise all avenues possible to be certain that insurance carriers are carrying out their contractual responsibility towards their clients, are refraining from doing anything to disrupt the patient/doctor relationship, and are making available to the medical profession and the State the reasonable fee schedule

COMMENDATION RESOLUTION

Military Physicians

BY: TMA BOARD OF TRUSTEES

Whereas, Tennessee, once again, lived up to its hallowed reputation as the "Volunteer State," with more than 20,000 Tennesseans participating in the Desert Shield/Storm operations to liberate Kuwait, either as active duty military, guardsmen, or reservists; and

Whereas, A large number of Tennessee Medical Association members were among the thousands activated in the Persian Gulf War service either abroad or at bases in the United States; and

Whereas, These physicians demonstrated the most noble qualities of their profession and their patriotism toward this great country during this time of crisis; and

Whereas, The sacrifices made by physicians and others during the Desert Shield/Storm operation had been noted in a general way through the news media; and

Whereas, Tennessee Medical Association desires to recognize its members in a more formal personal manner. Now, therefore be it

RESOLVED, That the Tennessee Medical Association on this day, April 11, 1991, does recognize and honor its members who served the branches of the United States military during the Persian Gulf War, and be it further

RESOLVED, That as a permanent reminder of this service, a copy of this resolution, appropriately engrossed, be presented to all members of the Tennessee Medical Association identified by their component medical society as having served in the Desert Shield/Storm operation.

they use, including the appropriate definitions for evaluation; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE D—recommended adoption of Resolution No. 27-91.

ACTION: ADOPTED

RESOLVED, That a formal report on the feasibility of the annual meeting being held in Chattanooga be submitted to the Board of Trustees and/or the House of Delegates for consideration and action; and be it further

RESOLVED, That this resolution, unless reaffirmed or modified prior thereto, shall terminate after the regular annual meeting of the House of Delegates in 1998.

REFERENCE COMMITTEE C—recommended referral of Resolution No. 28-91 to TMA Board of Trustees.

ACTION: REFERRED TO TMA BOARD OF TRUSTEES

RESOLUTION NO. 28-91

TMA Annual Meeting in Chattanooga

BY: JOEL E. AVERY, M.D., DELEGATE
CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Whereas, The Tennessee Medical Association (TMA) holds an annual meeting to conduct important business of the Association; and

Whereas, This annual meeting constitutes the largest medical meeting in Tennessee; and

Whereas, This annual meeting rotates between three of our state's major municipalities—the cities of Knoxville, Memphis, and Nashville; and

Whereas, This rotation system enables TMA delegates and guests of the House to take advantage of the facilities, activities, attractions, and cultural events available in each of the three cities: and

Whereas, The TMA does not rotate its annual meeting to Chattanooga, the fourth largest metropolitan area in the state of Tennessee or any other part of southeast Tennessee which is home to over 500,000 Tennesseans including 1,000 physicians, and this decision not to meet in Chattanooga has not been reviewed by the House or staff of the TMA in several years; and

Whereas, The city of Chattanooga has available a substantial number of excellent meeting and hotel facilities and is home to a number of scenic attractions, fine restaurants, cultural events, and other amenities which make it a natural convention meeting location; and

Whereas, The new multi-million dollar Tennessee Aquarium in Chattanooga will be open to the public in May 1992, representing the first new major attraction for the state of Tennessee in a number of years; and

Whereas, The city of Chattanooga would welcome the opportunity to host the annual meeting of the TMA in accordance with an established rotation policy. Now, therefore be it

RESOLVED, That the House of Delegates and the staff of the Tennessee Medical Association study the feasibility of including Chattanooga in the annual meeting rotation system with the assistance of the appropriate officials in Chattanooga; and be it further

MEMORIAL RESOLUTION

Rudolph H. Kampmeier, M.D.

BY: PAST PRESIDENTS OF THE TENNESSEE MEDICAL ASSOCIATION

Whereas, For nearly 60 years Rudolph H. Kampmeier, M.D., was an active member of the Tennessee Medical Association; and

Whereas, He served this Association as president in 1964: and

Whereas, He further served this Association as editor of the *Journal of the Tennessee Medical Association* from 1950 to 1971; and

Whereas, In those capacities of leadership in this Association he was an inspiration and a source of wise counsel both to the younger members of the Association and to his contemporaries alike; and

Whereas, As a teacher of medicine he was unsurpassed; and

Whereas, For this outstanding leadership and inspiration he was named outstanding physician of the year in 1958; and

Whereas, Rudolph H. Kampmeier, M.D., departed this life of singular devotion to medicine on June 25, 1990 at the age of 92 years. Now, therefore be it

RESOLVED, That we the members of the House of Delegates of the Tennessee Medical Association here assembled express our deep sorrow at his passing; and be it further

RESOLVED, That this resolution be spread upon the minutes of the Association; and be it further

RESOLVED, That a copy of this resolution be appropriately engrossed and presented to the family of Rudolph H. Kampmeier, M.D.

DISTINGUISHED SERVICE AWARDS

The Distinguished Service Award, established in 1964, is presented annually by the TMA Board of Trustees to member physicians in recognition of outstanding service or contributions to the advancement of medical science, the TMA, or the public welfare, whether of a civic or scientific nature. At the TMA's 156th annual meeting in Memphis, TMA Board Chairman Rex A. Amonette, M.D., presented three worthy recipients with this prestigious award.



George Eckles, M.D., recognized for his efforts in advancing the laparoscopic cholecystectomy procedure using laser technology, was nominated by the Rutherford County/Stones River Academy of Medicine.

Dr. Eckles developed a particular interest in this surgical technique, and he then worked diligently to see that the Middle Tennessee Medical Center in Murfreesboro obtained the equipment and tools to allow these procedures to be performed.

In October of 1989, Dr. Eckles performed the first laparoscopic cholecystectomy in Murfreesboro. Since that time, he has trained numerous colleagues in his community and visiting surgeons from around the country in the technique. For the past year, as one of the pioneers in this field, he has been an active member of many faculties and training courses across the United States.

Dr. Eckles received his medical degree from the University of Tennessee College of Medicine in 1973. He is a fellow of both the American College of Surgeons and the Southeast Surgical Congress, and he is also a diplomate of the American Board of Surgery. Dr. Eckles is currently in the private practice of general surgery at the Murfreesboro Medical Clinic & SurgiCenter.



Eddie J. Reddick, M.D., was nominated by the Nashville Academy of Medicine, mainly for his pioneering work with the laparoscopic laser cholecystectomy procedure.

Not only has Dr. Reddick been on the leading edge in performing the procedure, but he has instructed more than 1,000 of his colleagues nationwide in this procedure, which saves the patient pain, valuable recovery time, and cost. As a result of his work, laparoscopic cholecystectomy is fast becoming the treatment of choice for gallbladder trouble. Spurred by his success, surgeons are applying the technique to other ailments as well.

Dr. Reddick has been recognized by numerous publications, including the *Wall Street Journal*, where he was dubbed "the procedure's most prominent champion."

Dr. Reddick earned his medical degree from the University of Arkansas School of Medicine in 1975. During his extensive military career, he was chief of education and training at the US Army Aeromedical Center and surgical director of the ICU at the Madigan Army Medical Center. He received the Army Commendation Medal and the Flight Surgeon of the Year Award.

A fellow of the American College of Surgeons, Dr. Reddick is currently director of the Laparoscopic Laser Center of Baptist Hospital in Nashville.



Thomas N. Stern, M.D., was nominated by the Memphis-Shelby County Medical Society for his dedication to the health of children in Memphis.

Dr. Stern, a second-generation cardiologist, has served for more than a decade as a commissioner of the Memphis City Schools Board of Education, and as the Board's president in 1982 and 1986. While serving in this role, he has provided muchneeded physician leadership in the problem solving of health issues threatening Memphis children, such as drug abuse, teen pregnancy, and the inadequacy of sex education in public school classrooms. He is also a member of the board of directors of the Council of Great City Schools.

Dr. Stern earned his medical degree from Washington University Medical School in 1948. During his military career, he achieved the rank of Captain in the US Air Force Medical Corps and served as chief of cardiology in the 64th General Hospital.

Dr. Stern is a fellow of both the American College of Physicians and the American College of Cardiology. He is currently in private practice with The Cardiology Group of Memphis, and he is also the chief of cardiology training at Baptist Memorial Hospital in Memphis, the largest private hospital in the United States.

COMMUNITY SERVICE AWARDS

Each year since 1976, the Tennessee Medical Association has been privileged to present its Community Service Award to citizens who have made contributions to their community and state in the very broad field of health care. At the TMA's 156th annual meeting in Memphis, Rex A. Amonette, M.D., chairman of the TMA Board of Trustees, presented the awards to three Tennesseans for their exceptional efforts to promote better general health and well-being of the population in their respective communities.



Mrs. Sarah Cannon, best known by her stage persona of Cousin Minnie Pearl, was nominated by the Nashville Academy of Medicine, largely based on her support of the American Cancer Society (ACS).

Mrs. Cannon has been involved with the ACS on a national level since 1969, serving as national co-chairperson of Crusade in 1970-71 and leading the successful Nashville Crusade in 1988. Her annual involvement with the "April Evening" fundraiser has resulted in unprecedented success.

In 1985, Mrs. Cannon was herself diagnosed as having breast cancer. In May of 1986, she trained as a "Reach To Recovery" volunteer, and has been involved in that vitally important program ever since. Her firm and outspoken belief in mammography has influenced countless women to have mammograms.

In 1986, Mrs. Cannon received the ACS John Tune Award for her devotion and dedication to ACS activities. In 1987, she received both the ACS Courage Award from President Ronald Reagan, and the Roy Acuff Humanitarian Award, presented by the country music industry to entertainers who exhibit caring and concern through community service. In 1989, she received the Nashville Academy of Medicine Community Service Award.



Mrs. Dorothy Duncan, who for more than 30 years has committed her efforts to upgrade the health care in her rural Fentress County community, was nominated by the Putnam County Medical Society.

Mrs. Duncan began her health care career in 1960 as a nurses' aide at the then new Fentress County Hospital. In 1969, Mrs. Duncan moved as a nurses' aide to the Fentress County Health Department. She began training at the hospital on her own time and later earned both the licensed practical nurse and registered nurse degrees.

In 1975, Mrs. Duncan enrolled in the Birmingham Medical Center to receive training as a family planning nurse practitioner. She returned to serve in this capacity throughout the 14-county Upper Cumberland Region until 1982, when she entered Meharry Medical College and earned a diploma as a nurse midwife. She then returned to Fentress County to serve as a prenatal and family planning nurse specialist.

In 1988, Mrs. Duncan was appointed nursing supervisor at the Fentress County Health Department, and she is presently supervising their prenatal program. She is the only midwife in the area and has been a pioneer in providing prenatal care to this rural community.



Mr. Kyle Hauth, executive director at the McNairy County Development Center (MCDC) since July of 1984, was nominated by the Consolidated Medical Assembly of West Tennessee.

The MCDC provides developmental training, sheltered workshop opportunities, job placement, and numerous other social and health care services to 60 mentally retarded citizens.

Under Mr. Hauth's direction, the agency has also expanded its residential services from 14 to 31 individuals in McNairy County. These handicapped citizens receive 24-hour care in group homes and they learn to become more comfortable and competent, eventually leading them out of group care to a self-sufficient lifestyle.

Mr. Hauth is responsible for all phases of directing the MCDC, including staffing, planning, securing funding, fiscal control, and compliance with state and federal regulations. His experience with the handicapped includes working as a psychiatric technician at the Memphis Health Institute and a social worker at the Quinco Mental Health Center.

Mr. Hauth earned a bachelor of arts degree in sociology from Union University and a master of science degree in general counseling and personnel service from Memphis State University.

TENNESSEE'S OUTSTANDING PHYSICIAN OF THE YEAR



Outstanding Physician of the Year Award is presented to Dr. Hall S. Tacket, Memphis (right) by TMA House of Delegates speaker, Dr. George H. Wood.

The TMA House of Delegates elected Hall S. Tacket, M.D., of Memphis as the 1991 Outstanding Physician of the Year at the 156th TMA annual meeting. The speaker of the House, George H. Wood, M.D., presented the award to Dr. Tacket at the closing session of the House of Delegates on April 13. Dr. Tacket was nominated by the Memphis-Shelby County Medical Society.

Hall S. Tacket, M.D., a native of Dyer, Tennessee, received his medical degree in 1944 from the University of Tennessee College of Medicine. He did an internship at Philadelphia General Hospital in 1944-1945. Then in 1945 he entered the US Army and was discharged in 1947 with the rank of captain. He then did a residency in medicine at the John Gaston Hospital at the University of Tennessee from 1947-1950.

A fellow of both the American College of Physicians and the American College of Cardiology, and a diplomate of the American Board of Internal Medicine, Dr. Tacket was nominated for this year's award because of his "training of and dedication to the medical students and physicians of Memphis."

For 36 years, Dr. Tacket was in private practice (1950-1986), serving as a role model for medical students, residents, colleagues, and his peers alike. He became actively involved in teaching, and is noted for his innovative methods of teaching medicine in a one-onone situation. At the University of Tennessee, Memphis, Dr. Tacket assumed a unique role a few years ago when he re-attended medical school in order to evaluate the

instructional methods and academic structure of the university's medical college for its administration and faculty.

He has been honored with several awards and recognitions including being elected Governor of the American College of Physicians for the Kentucky/Tennessee region from 1967-1973, receiving his Master Status from the American College of Physicians in 1990, and receiving the Laureate Award from the Tennessee Chapter of the American College of Physicians in 1989. He also received the Outstanding Teacher Award from Baptist Memorial Hospital in 1980 and the Excellence in Teaching recognition from the Medical Student Executive Council of the University of Tennessee, Memphis in 1988.

Dr. Tacket is presently chief of the general internal medicine section, a consultant in electrocardiography, and a member of several committees at Baptist Memorial Hospital in Memphis. He also serves on many committees, and is on the editorial board of Tennessee Medical Alumnus, at the University of Tennessee, Memphis, where he is a professor of medicine.

In addition to his membership in the Memphis-Shelby County Medical Society, the Tennessee Medical Association, and the American Medical Association, Dr. Tacket is also a member of the American and Tennessee Societies of Internal Medicine and the Memphis Academy of Internal Medicine.

Dr. Tacket resides in Memphis with his wife Jeanne. They have three children.

TMA Annual Meeting Highlights Memphis—April 1991



Outgoing TMA president Dr. Hamel B. Eason, Memphis (right) turns over gavel to incoming president Dr. Howard L. Salyer, Nashville



Incoming TMA president Dr. Howard Salyer presents outgoing president's wife, Diana Eason, with gift of appreciation from TMA



Joyce Cobb brought everyone to the dance floor at the President's Banquet



TMA Board chairman Dr. Rex Amonette and wife, Johnnie, TMA Auxiliary president, enjoy the President's Banquet



Dr. Hamel Eason (far right) and his wife, Diana, greet AMA Board vice-chairman Dr. Robert McAfee (far left) and TMA past president and AMA delegate Dr. Thomas Ballard, Jackson, at the President's Reception



Dr. Howard Salyer and wife, Edna, enjoy the President's Reception



Dr. Hamel Eason addresses the House of Delegates



U.S. Surgeon General Dr. Antonia Novello pays a surprise visit to delegates at Saturday's session



Dr. Robert McAfee, AMA Board vice-chairman, addresses the House of Delegates



Medicine and Religion Breakfast features a debate titled "Live or Let Die" with Dr. Eugene Diamond of Chicago and Dr. Nancy Dickey, AMA Board member



CARE Program Chairman Dr. Robert Bowers releases TMA research statistics during a press conference



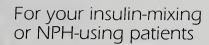
TMA past presidents from left (standing) Drs. J. Kelley Avery, Nashville, 1975; George A. Zirkle Jr., Knoxville, 1980; Nat E. Hyder Jr., Johnson City, 1983; Thomas K. Ballard, Jackson, 1984; James R. Royal, Chattanooga, 1986; Allen S. Edmonson, Memphis, 1981; William O. Miller, Memphis, 1989; Clarence R. Sanders, Gallatin, 1985; James T. Galyon, Memphis, 1987; (seated) John B. Thomison, Nashville, 1988; Francis H. Cole, Memphis, 1969; David H. Turner, Chattanooga, 1977; John H. Burkhart, Knoxville, 1965; John B. Dorian, Memphis, 1978.



Dr. Rex Amonette recognizes Distinguished Service Award winners at President's Banquet

1991 TMA ANNUAL MEETING—HOUSE OF DELEGATES COMPOSITION FIRST SESSION: APRIL 11—SECOND SESSION APRIL 13

	TY OFFICIA MEMBERS	1111	• •	OLUGIND OLUGI	ION AI MIL I	Eires	Conned
	EX-OFFICIO MEMBERS	First	Second	County/Component Society		First Session	Second Session
	OFFICERS	Session	Session	and the second	Robert C. Patton, M.D.	Present	Present
President	Hamel B. Eason, M.D.	Present	Present	WASHINGTON-UNICDI-JDHNSDN	Dow Strader, M.D. Rurgin F. Dossett M.D.	Present	Present
Vice-President		Present	Present	THACHING ON-UNIQUE-JUTINOUT	Clarence E. Goulding Jr., M.D.	Present	Present
Vice-President	R Gary Samples M.D.	Present	Present		David P. Roe, M.D. James M. Wilson, M.D.	Present Present	Present Present
Vice-President	Richard M. Pearson, M.D. BOARD OF TRUSTEES	Present	Present	YOUNG PHYSICIAN SECTION	Lytle Brown IV, M.D.	Present	Present
R. Benton Adkins Jr., M.D. — Present			MIDDLE TENNESSEE GRAND DIVISION BEDFDRD				
Robert E. Bowers, M.D.		Present Present	Present	BENTDN-HUMPHREYS	Subhi D. Ali, M.D.	Present	Present
Duane C. Budd, M.D. Virgil H. Crowder Jr., M.D.		Present	— Present	BUFFALD RIVER	Parker Elrod. M.D.	Present	Present
Dennis A. Higdon, M.D.		Present	Present	CDFFEE DEKALB	Melvin L. Blevins, M.D.		_
John W. Lamb, M.D. William D. Miller, M.D.		Present Present	Present Present	DICKSDN* FENTRESS*			
John R. Nelson Jr., M.D.		Present	Present	FRANKLIN	Thomas A. Smith, M.D.	Present	Present
Thurman L. Pedigo, M.D. Montie E. Smith Jr., M.D.		Present Present	Present Present	GILESJACKSDN	Malcolm A. Gox, M.D.	Present	Present
George H. Wood, M.D.	001111011000	Present	Present	LAWRENCE	David L. Garey, M.D.	Present	Present
1st District		_	_	LINCDLN MACDN*	***		
2nd District	Robert M. Dverholt, M.D. Stephen S. Hawkins, M.D.	-	_	MARSHALL* MAURY	Thomas P. Dunosa M.D.	Dronant	Drocont
4th District	E. Morgan Dudney, M.D.	Present	Present			Present —	Present
5th District	Fred Ralston Jr., M.D. Thomas C. Krueger, M.D.	Present	Present	MDNTGDMERY	William Inel Pedigo M D	Present Present	Present Present
7th District	Norman Henderson, M.D.	Present	Present	NASHVILLE ACADEMY	Louis J. Bernard, M.D.	-	-
8th District		_	Present		Arthur G. Bond Jr., M.D. H. Victor Braren, M.D.	Present	_
10th District	Hugh Francis Jr., M.D.	_	_		John W. Brock III, M.D.	-	_
Charles E. Allen, M.D.	AMÁ DELEGATES	Present	Present		John C. Brothers, M.D. B. Stephens Dudley, M.D.	_	_
Thomas K. Ballard, M.D.		Present	Present		William M. Gavigan, M.D.	_	Present
John S. Derryberry, M.D. Allen S. Edmonson, M.D.		Present Present	Present Present		John W. Hammon Jr, M.D. William B. Harwell Jr., M.D.	Present	Present
John B. Thomison, M.D.		Present	Present		James M. High, M.D.	Present	Present
George A. Zirkle Jr., M.D.	PAST PRESIDENTS OF TMA	Present	Present		Dana L. Latour, M.D. Russell B. Leftwich, M.D.	Present	Present Present
John H. Burkhart, M.D. Francis H. Cole, M.D.		Present Present	Present Present		Malcolm R. Lewis, M.D. Cullen R. Merritt II, M.D.	Present	Present Present
J. Kelley Avery, M.D.		Present	Present		Michael P. Miller, M.D.	Present	Present
David H. Turner, M.D. John B. Dorian, M.D.		Present Present	Present Present		Thomas E. Nesbitt Jr., M.D. J. Wills Dglesby, M.D.	_	_
Nat E. Hyder Jr., M.D.		Present	Present		T. Guv Pennington, M.D.	_	_
Clarence R. Sanders, M.D. James R. Royal, M.D.		Present Present	Present Present		Frank A. Perry Jr., M.D. Sarah H. Sell, M.D.	— Present	Present
James T. Galyon, M.D.		Present	Present		Paul R. Stumb, M.D.	Present	Present
Richard T. Light, M.D.	STATE CHIEF MEDICAL OFFICER	Present	_		John J. Warner, M.D. Ralph E. Wesley, M.D.	_	Present
					Melborne A. Williams, M.D.		_
	DELEGATES			DVERTDN	Laura Meyers (Student Delegate) W. G. Quarles, M.D.	Present Present	Present
County/Component Society	EAST TENNESSEE GRAND DIVISION			PUTNAM	Charles E. Jordan III, M.D. Charles T. Womack III, M.D.	Present Present	Present Present
BLDUNT	J. J. Ingram, M.D.	Present	Present	RDBERTSDN*		Tresent	TTOSCITE
BRADLEY	R. D. Proffitt, M.D. John Chambers, M.D.	Present Present	Present Present	RUTHERFORD-STDNES RIVER ACADEMY		Present	Present
CAMPDELL	Hays Mitchell, M.D. William Lewis Stafford, M.D.	Present	Present	SMITH	Hugh E. Green, M.D.	Present	Present
CARTER		Present	Present	SUMNER Warren	Wendell V. McAbee, M.D.	Present Present	Present Present
CHATTANOOGA-HAMILTON	Joel E. Avery, M.D. Samuel L. Banks, M.D.	Present	Present	WHITE* WILLIAMSDN		Present	Present
	David R. Barnes, M.D.	Present	Present	WILSON	Joseph L. Willoughby, M.D.	Present	Present
	John M. Cox, M.D. William K. Dwyer, M.D.	_	_	YOUNG PHYSICIAN SECTION	James C. Bradshaw Jr., M.D. Robert W. Herring Jr. M.D.	Present Present	Present Present
	Michael S. Greer, M.D.	Present Present		WEST TE	NNESSEE GRAND DIVISION		. , , , , , , , , , , , , , , , , , , ,
	Jack D. Hixson III, M.D. Dabney James, M.D.	Present	Present Present	CONSDLIDATED	James T. Craig Jr., M.D. James H. Donnell, M.D.	Present	Present Present
	John W. McCravey, M.D. Frank J. Miller, M.D.	=	_		Jim King, M.D.	Present	Present
	W. C. A. Sternbergh Jr., M.D.			HARDIN	Charles W. White, M.D.	Present —	Present —
COCKE	Sam J. Williams IÎI, M.D. Daniel Armistead, M.D.	Present —	Present —	HENRYMEMPHIS-SHELBY	Allen C. Doy J. B. D.	Desc1	Descri
CUMBERLAND	R. Donathan Ivey, M.D.	Present	Present	WEWSHI2-2HETRI	Allen S. Boyd, M.D. F. Hammond Cole Jr., M.D.	Present Present	Present Present
HAWKINS*	James F. Easterly, M.D.	_	Present		T. Kyle Creson Jr., M.D. Thomas A. Currey, M.D.	Present	Present Present
KNDXVILLE ACADEMY	John H. Acker, M.D.	— Procent	— Present		Arnold M. Drake, M.D.	Present Present	Present
	Richard A. Brinner, M.D. Caroline Gooley, M.D.	Present Present	Present		James Chris Fleming, M.D. Jerre M. Freeman, M.D.	Present	Present Present
	John E. DePersio, M.D. Mary B. Duffy, M.D.	Present	— Present		Albert J. Grobmyer III, M.D.	Present	Present
	David G. Gerkin, M.D.		—		Leonard H. Hines, M.D. C. Eugene Jabbour, M.D.	Present	Present
	Douglas K. Hembree, M.D. Perry B. McCallen, M.D.	Present	Present		James Gibb Johnson, M.D.	Present	Present
	Jerome F. McKenzie, M.D.	Present	Present		William I. Mariencheck, M.D. William Lee Moffatt III, M.D.	Present	Present
	William R. McKissick, M.D. Robert N. Montgomery, M.D.	Present	Present —		Alan Marc Nadel, M.D. Evelyn B. Dgle, M.D.	Present Present	Present Present
	Joseph B. Moon, M.D.	Present	Present		Phil E. Drpet Jr., M.D.	_	_
	William S. Muse Jr., M.D. Cecil D. Rowe, M.D.	Present	Present		Phillip A. Pedigo, M.D. Guy J. Photopulos, M.D.	Present Present	Present
LAKEWAY	William J. Schneider, M.D. C. Cole Anderson, M.D.	Present —	Present —		Eugene J. Spiotta Jr., M.D.		-
	William John Gutch III, M.D.	Present	Present		Robert L. Summitt, M.D. Paul A. Thompson, M.D.	Ξ	
MDNRDE		Present	Present		William C. Threlkeld, M.D.	Present	— Procent
RDANE-ANDERSON	Thomas C. Caldwell Jr., M.D.	Present	Present		A. Roy Tyrer Jr., M.D. C. Ferrell Varner, M.D.	Present Present	Present Present
	Dtis W. Jones, M.D. Paul E. Spray, M.D.	Present Present	Present Present		Jesse C. Woodall Jr., M.D. Phillip E. Wright II, M.D.	Present	Present
SCDTT	Maxwell Huff, M.D. Vincent B. Tolley, M.D.	_	Present	MONTHUEOX	Clann D. Crater (Student Delegate)	Present	Present
SULLIVAN	Jack Butterworth, M.D.	Present	Present	NDRTHWEST		Present Present	Present Present
	Jere Ferguson, M.D. Don A. Flora, M.D.	Present	Present Present	TIPTONYOUNG PHYSICIAN SECTION	Warran A Alayandar M.D.	Present	Present
	David Garriott, M.D.	Present	Present	MEDICAL STUDENT SECTION	David Stallard	Present —	Present —
F4	fiele delegator continuity many than any security	'A 15-4-4	salu anna The	shows information was taken from attender	an spende simed by the delegates		





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REPORTS OF OFFICERS

Report of the President

HAMEL B. EASON, M.D.

As I write this report to you, the Tennessee Medical Association House of Delegates, in early February 1991, it is difficult to foresee the state of our union at the time you will read this message. Will war be over and a "new world order" be evolving in the Middle East? Or will we be bogged down in a bloody land conflict with weakening public approval of a far away battle? These mega-events hang over the current events in our profession and somewhat redirect our thoughts. Two of our 14-member Board of Trustees are now serving on active military duty. Our profession's role to prevent death and disability and control suffering extends across the globe to our men and women in the Persian Gulf war zone. At the same time, disease and accidents continue at home and we proceed with our work. When you see our agenda in this context, you see the nobility of our profession. Although some would call it pride, I believe we all just feel a sense of gratitude in being afforded the chance to be a physician and serve our patients. God bless that opportunity in the coming year. I hope our leaders in institutions, government, and business will somehow view us in that light.

It is my conviction that brevity is a virtue. I am unable to give you the details of my year as your president. I must tell you the work is done by committees, the Board of Trustees, and our staff, trying to implement the intent of your policy established over the years. Meetings come one behind the other to get this work done. I can only commend this system and those who toil therein. It works.

Last year you approved a dues increase and the program to give TMA a new headquarters building. Our long-term home had become a dinosaur. Forty years old and jammed with enlarging staff and programs, this historic old building will be replaced by a large modern facility sufficient to meet our needs well into the new millennium. A symbol of dedication to serving our membership, the new headquarters is addressed: 2301 21st Avenue South, Nashville, Tennessee. On Saturday, July 13, 1991, a grand Dedication Ceremony and Open House will introduce our new facility to the public and our membership. I hope many of you will join us in the celebration.

The TMA Impaired Physician Peer Review Committee (IP/PRC) is a bright example of the way TMA seeks to meet the challenging needs of our membership. In the April issue of the Journal of the Tennessee Medical Association, Dr. Charles B. Thorne, the devoted chairman of the IP/PRC, thoughtfully traces the history of our Impaired Physician Program. This history should be required reading for us all. The TMA Board of Trustees strongly endorses the work done and looks to a future of stability and service to our members who fall to the affliction of chemical dependency. We are currently seeking funding and interviewing candidates for an associate to assist and work with Dr. David Dodd. David's outstanding efforts on our behalf deserve to be congratulated and propagated to ensure the

future of this program, which not only serves us, but State Volunteer Mutual Insurance Company and the State Board of Medical Examiners.

One privilege of the president is the opportunity to visit component societies and personally communicate with the membership. I have enjoyed this function. The warmth of our collegiality is global. The welcome I received everywhere was deeply appreciated.

Dr. Allen S. Edmonson is a candidate for the office of vice-speaker of the House of Delegates of American Medical Association. Dr. Charles E. Allen is a candidate for the Council on Medical Education of AMA. The election will take place at the AMA's annual meeting in Chicago in June. All of TMA is heartily working to make this important effort successful. Tennessee has offered AMA outstanding leaders throughout the years. We seek to uphold this high tradition.

Through the years, TMA has "been there and come through" when a crisis occurred. No finer example can be found than the formation of the SVMIC at the time of our frightening medical liability insurance crisis in Tennessee. A major responsibility of the president is to serve a three-year term on the SVMIC Board of Directors. An amazing blend of physician involvement and professional staff make our company the most highly regarded physician mutual company in our country. You should participate in the annual meeting and at least one risk management seminar each year.

One of the loveliest things in the medical marriage is the fabulous spin-off, the Tennessee Medical Association Auxiliary. In addition to the love and nurture on the home scene, we get intelligent devoted activity in diverse medical affairs—AMA-ERF, Teen Health Workshops, and legislative action is benefiting us all. Mrs. Johnnie Amonette has done a great job following in a long line of great TMAA presidents. Johnnie, we are grateful.

To be the 136th president of the TMA has been a career high for me. When I think of that long thread of 135 presidential leaders, I am in awe. I am grateful to you for the opportunity. God bless you and TMA.

REFERENCE COMMITTEE C—reviewed the report of the president and recommended that it be filed.

ACTION: FILED

Report of the Board of Trustees

REX A. AMONETTE, M.D., Chairman

The past year has been filled with activities infrequently experienced by the staff and Board of Trustees of the Tennessee Medical Association, in that it was a year of transition

into our new Association building. However, I am pleased to report that those activities did not interfere with the management of the day-to-day affairs of the Association. We feel that we have continued to oversee the financial, property management, recordkeeping, legislative, and all demands of the organization as required by state and federal law. Each year this responsibility becomes more and more difficult due to the increasing factors related to medical care in Tennessee.

To perform its delegated responsibilities, the Board conducted four regular quarterly meetings, and the highlights of those quarterly meetings were promptly reported in the *Journal of the Tennessee Medical Association* in order for all members to be aware of the Board's actions. In addition to the regular quarterly meetings, the Board's Executive Committee met on two occasions to act upon timely items of business and to prepare for future Board meetings.

Although the reports of the president, secretary-treasurer. editor, executive director, and committee chairmen detail specific activities related to each office, the Board has been very much involved in the actions and activities of each. Matters pertaining to general administration, finances, long range planning, membership, annual meeting, AMA conventions, legislation, new headquarters building, drug testing of TMA members, Board of Medical Examiners, Durable Power of Attorney for Health Care, and Impaired Physician Committee activities were some of the major considerations and actions taken during regular meetings of the Board and/or Executive Committee.

The following is a condensed outline of the many items brought before the Board and/or Executive Committee and acted upon during the past 12 months:

Board and Executive Committee Actions

Second Quarter Board Meeting-April 4 and 7, 1990

The Board:

- Appointed members to the following committees of the Board: Executive Committee, Finance Committee, Publications Committee, Committee on Exhibits, Committee on Long Range Planning, Tennessee Medicare Access Program (TMAP), Annual Meeting Committee, and Travel Committee.
- Approved the addition of two physicians to the Impaired Physician Committee.
- Adopted positions on resolutions submitted to the TMA House of Delegates.
- Approved a continuation of a \$500 contribution for the Southeast Conference on Prescription Drug Abuse.
- Agreed to encourage the AMA to conduct an annual national conference on prescription drug abuse and to select Nashville as a site for a future conference.
 - Accepted the 1989 audit report.
- Recognized Drs. Cole, Ogle, Stubbs, Thomison, Young, and Craig for their service to TMA as members of the Board of Trustees.
- Received a report from Dr. James Craig Jr., Board chairman, regarding a March 14, 1990 meeting between TMA physician representatives and Gov. Ned McWherter. The meeting was called to discuss the many problems concerning the Board of Medical Examiners.
- Nominated Dr. Ann H. Price, Nashville, for the AMA Women in Medicine Advisory Panel.
- Approved a TMA Auxiliary request for \$8,000 for the Teen Health Workshops and \$2,000 for the AMA-ERF Sharing Card Program.

- Elected Dr. Rex A. Amonette, Memphis, as chairman of the Board of Trustees and reelected Dr. John R. Nelson Jr., Knoxville, as vice-chairman of the Board. Dr. R. Benton Adkins Jr., Nashville, was elected secretary-treasurer, and Mr. L. Hadley Williams was reelected assistant secretary-treasurer.
- Appointed Board members to fill the vacancies for Board liaison with medical specialty organizations.
- Voted to reimburse the delegate and/or alternate delegate of the Young Physician Section for a maximum of four days to attend the AMA annual and interim meetings.
- Approved a recommendation from the Governmental Medical Services Committee to write the specialty society presidents and request each to submit a name for an ad hoc panel consisting of five or six physicians, to help monitor reimbursement policies with the state Medicare carrier.
- Referred a request from Dr. James N. Etteldorf, Memphis, regarding the involvement of TMA in the coordination of a statewide Poison Network Control Center, to the Committee on Rural and Community Health.

Executive Committee Meeting-May 30, 1990

The Executive Committee:

- Reviewed 1990 resolutions referred by the House of Delegates in April.
- Appointed Dr. Robert Ikard, Nashville, as assistant editor for the *Journal of the Tennessee Medical Association*.

Third Quarter Board Meeting—July 14-15, 1990

The Board:

- Adopted as policy the state Utilization Review Guidelines developed by a coalition consisting of TMA, the Tennessee Hospital Association, the insurance industry, and the Tennessee Nurses Association.
- Confirmed the Executive Committee's decision to renominate state Representative Paul Starnes for the second annual AMA Nathan Davis Award.
- Endorsed a plan for TMA member recruitment and retention as called for in Resolution No. 10-90 and resident physician recruitment as called for in Resolution No. 2-90.
- Changed TMA annual meeting policy by adding the following provisions: (1) TMA registration will be required of *all* annual meeting attendees; (2) Tennessee physicians who are not TMA members will be required to pay a registration fee of \$75; (3) TMA reserves the right to "block" periods of time in the annual meeting schedule during which there will be *no* meeting functions of medical specialty societies or other organizations.
- Changed the format of the 1991 annual meeting as called for in Resolution No. 13-90 by: (1) Moving the first session of the House of Delegates to *Thursday* morning. (2) Moving reference committee meetings to *Thursday* afternoon. (3) Reserving a midday period on Friday for lunch in the Exhibit Hall. (4) Scheduling breakfast in the Exhibit Hall on Thursday morning, preceding the House of Delegates meeting.
- Selected the Hyatt Regency Hotel, Knoxville, as the site of the April 1993 annual meeting.
- Reviewed a comprehensive analysis prepared by staff on drug testing as a follow-up to the provisions of Resolution No. 15-90; deferred action to the October Board meeting to allow time for further study regarding voluntary drug testing.
- Confirmed the Executive Committee's decision to appoint Dr. Duane Budd, Johnson City, to chair the task force as called for in Resolution No. 19-90 to conduct a comprehensive study

of the Board of Medical Examiners, and approved Dr. Budd's selection of task force members.

- Appointed the following physicians to the newly created Organ Procurement Committee, as called for in Resolution No. 20-90: *Transplant Physicians: East*—Dr. Thomas B. McGinnis, Johnson City; *Middle*—Dr. William H. Frist, Nashville, chairman; *West*—Dr. G. Phillip Schoettle Jr., Memphis. *Non-Transplant Physicians: East*—Dr. Jackson J. Yium, Chattanooga; *Middle*—Dr. Harold P. Smith, Nashville; *West*—Dr. Phillip H. Dirmeyer, Memphis.
- Received a report from staff on information provided to TMA members through the *TMA Chart* and to all component medical societies regarding release of information by peer review organizations as called for in Resolution No. 21-90.
- Received a report from staff on the implementation of Resolution No. 23-90 (Corporal Punishment in Tennessee Schools).
- Accepted the resignation of Dr. Dianne Murphy as chairman of the Committee on HIV Infection and AIDS, due to her appointment by the US Food and Drug Administration.
- Nominated Dr. Charles White, Lexington, for consideration of appointment to the state Board of Directors of the Tennessee Comprehensive Health Insurance Pool. Nominated Dr. Ed Reed, Memphis, for consideration of appointment to the state Medicaid Medical Care Advisory Committee. Nominated Dr. Duane C. Budd, Johnson City, for consideration of appointment to the Special Joint Committee for Utilization of Ancillary Health Care. Nominated Dr. J. Kelley Avery, Nashville, for consideration of appointment to the special Joint Committee to Study Rising Health Care Costs.
- Received a report and acknowledged the special award presentation to the TMA Young Physician Section by AMA for "Outstanding Federation Membership Recruitment."
- Endorsed the AMA Health Access America proposal as outlined in the AMA Board of Trustees Report XX (A-90).
- Decided to present a Resolution of Commendation at the 1991 AMA annual meeting for the TMA Auxiliary 11-year history of fundraising for the AMA-ERF.
- Endorsed Dr. Allen S. Edmonson, Memphis, as a candidate for vice-speaker of the AMA House of Delegates.
- Nominated Dr. John H. Burkart, Knoxville, for the AMA Distinguished Service Award.
- Endorsed the nomination of Dr. Allen S. Edmonson, Memphis, for the Meritorious Service Award of the Tennessee Hospital Association.

Fourth Quarter Board Meeting—October 14, 1990

The Board:

- Received a report from the chairman of the TMA Impaired Physician Peer Review Committee regarding the Impaired Physician Program's long range plan.
- Received a report from task force chairman Dr. Duane Budd as called for in Resolution No. 19-90, and adopted a policy of inviting the president of the Board of Medical Examiners to report annually at the April meeting of the TMA House of Delegates.
- Endorsed the recommendations of the task force to seek amendments to the Medical Practice Act.
- Received a report from the Communications and Public Service Committee on implementation of the CARE program.
- Received a report on the progress of a membership/retention campaign.
- Approved a recommendation of the Committee on Continuing Medical Education for TMA to serve as a catalyst to

pull together other organizations in the development of a statewide CME consortium to study the concept of Focused CME.

- Received a status report on the Tennessee Medicare Access Program.
- Nominated Dr. Deborah R. Deason, Nashville, for consideration of appointment to the state Air Pollution Control Board.
- Nominated Drs. Jerome Abramson, Chattanooga, Dean G. Taylor, Nashville, and Phillip G. Pollock, Chattanooga, for consideration of appointment to the state Medical Laboratory Board. Also nominated (for non-pathologist position) Drs. Robert Alford, Nashville, Larry C. Brakebill, Knoxville, and R. Gary Samples, Cookeville.
- Nominated Dr. John D. Lay, Savannah, for consideration of appointment to the state Health Facility Penalties Board.
- Nominated Diane Killebrew, Nashville, Frances Jones, Nashville, Dr. R. Wayne Luther, Memphis, and Dr. Les Hargrove, Knoxville, for consideration of appointment to the state Board of Dieticians/Nutritionists.
- Nominated Dr. M. Douglas Leahy, Knoxville, for consideration of appointment to the state Medical Laboratory Board Task Force on CLIA.
- Received a report on the activities of the Medical Student Section and agreed that Dr. Salyer would serve as Board liaison to the MSS.
- Approved the establishment of an annual fee schedule for those medical specialty societies and other organizations requesting TMA joint sponsorship with Category 1 continuing medical education activities.
- Reviewed a list of all current TMA committee members and those whose terms expire in April 1991.
 - Reviewed a draft proposal for the 1991 TMA budget.
- Received a progress report on the construction of the new headquarters building.

First Quarter Board Meeting-January 12-13, 1991

The Board:

- Endorsed the candidacy of Dr. Charles Allen, Johnson City, for the AMA Council on Medical Education.
- Approved the TMA Impaired Physician Committee as the Tennessee representative for the Impaired Physician Program of the American College of Surgeons.
- Approved in concept the addition of an associate medical director for the Impaired Physician Program.
- Accepted a report on drug testing as called for in Resolution No. 15-90 and agreed to present it to the House of Delegates.
- Agreed to donate up to \$4,000 in support of regional meetings planned by the Tennessee Healthcare Exchange Forum.
- Appointed the following nominating committee representing each grand division: *East*—Drs. Nat E. Hyder Jr., Johnson City, Robert N. Montgomery, Knoxville, William E. Rowe, Chattanooga; *Middle*—Drs. William B. Harwell Jr., Nashville, Will G. Quarles Jr., Livingston, William J. Pedigo, Clarksville; *West*—Drs. Charles W. White, Lexington, James Chris Fleming, Memphis, Warren A. Alexander, Covington.
- Nominated and approved members to serve on each of the standing and special committees, TMA-SEF Board, Tennessee Medical Foundation Board, and IMPACT Board of Directors.
- Voted to recommend an amendment to TMA Bylaws that would create a position for one physician from the Young Physician Section on standing committees.
- Voted to dissolve the Drug Education and Evaluation Committee.
 - · Nominated Drs. B.J. Smith, Dickson, James C. Hunt,

Memphis, and Daniel J. David, Johnson City, for consideration of appointment to the state Community Health Agency Advisory Council.

- Nominated Dr. Robert D. Kirkpatrick, Memphis, for a position on the state Air Pollution Control Board.
- Agreed to request the Governmental Medical Services Committee to draft a resolution to present to the House of Delegates that would establish TMA policy that credentialing is a hospital medical staff responsibility, and not a responsibility of third party payors.
- Authorized the Interprofessional Liaison Committee to appoint the TMA representatives for the Medical-Legal Code Review Committee.
- Accepted the recommendations of the Communications and Public Service Committee to award the 1991 Community Service Awards to Mr. Kyle Hauth, Selmer, Mrs. Dorothy Duncan, Jamestown, and Mrs. Sarah Cannon, a.k.a. Cousin Minnie Pearl, Nashville.
- Voted to award 1991 Distinguished Service Awards to Drs. Thomas N. Stern, Memphis, George Eckles, Murfreesboro, and Eddie J. Reddick, Nashville.
- Agreed to reintroduce the following 1984 resolutions to the House of Delegates: No. 1-84 (Protective Head Gear for Horseback Riders); No. 3-84 (Penalties for Hunting While Under the Influence of Alcohol or Drugs); No. 8-84 (Mandatory Second Surgical Opinions); No. 10-84 (Physician Supervision of Nurse Practitioners); No. 11-84 (Insurance Coverage); No. 15-84 (Cost Control of Medical Services); No. 18-84 (Malpractice Insurance). The Board also voted to allow all remaining resolutions adopted in 1984 to sunset.
- Approved a corporate resolution which authorizes the TMA president and/or executive director to sell the TMA property located at 112 Louise Avenue, Nashville, Tennessee.
- Approved a request to allow the Medical Student Section space in the *Journal of the Tennessee Medical Association*.
- Agreed to waive the annual TMA dues, if requested, for those members called to active military service for six months or longer.
- Reappointed Mr. Charles L. Cornelius Jr., as TMA legal counsel, and Bellenfant & Miles, P.C., CPAs, as TMA auditor for 1991.

Executive Committee Meeting-February 20, 1991

The Executive Committee:

- Voted to contribute \$500 and cosponsor the 1991 Tennessee Medical Recruitment Fair.
- Received a report that all previously borrowed funds have been repaid in full by the SEF Board of Directors.
- Approved in principle the recommended goals and objectives established by the TMA Organ Procurement Committee.
- Approved the following changes in the Nominating Committee: Dr. James T. Craig Jr., Jackson, replacing Dr. Charles W. White, Lexington, and Dr. David Gerkin, Knoxville, replacing Dr. Robert N. Montgomery, Knoxville.
- Received a status report regarding completion of the new TMA headquarters.
- Approved staff's request to draft a Resolution of Commendation for all physician reservist members who have been called to active duty, and to present a copy of the resolution to each.

Actions Taken on 1990 Resolutions

In addition to the above items of concern, the Board responded to those matters referred to it by the House of Delegates last April. As required in Constitutional Amendment

No. 4-88, the Board hereby reports to the House actions taken on resolutions acted upon by the House of Delegates in April 1990:

Resolution No. 1-90

Subject: Dues to fund Tennessee Medical Association Student Education Fund. (This resolution was a reaffirmation of Resolution No. 3-83.)

Action: This resolution was adopted which reaffirmed Resolution No. 3-83 that established a \$15 dues increase earmarked for the TMA-SEF and was included in the billing cycle for 1991.

Substitute Resolution No. 2-90

Subject: Resident Recruitment/Section. This resolution, which was combined with No. 11-90, called for the TMA to undertake and develop a resident physician recruitment campaign, and work towards the creation of a resident physician section. It asked that the component medical societies with resident member categories work with TMA and the AMA to maximize resident recruitment efforts.

Action: TMA staff, in conjunction with AMA, component medical societies, and state medical schools, has been working on obtaining accurate addresses at which to contact residents, who by nature, are somewhat transient. This is key to all resident recruitment efforts. All of these identified residents are sent a letter once per quarter from TMA encouraging them to join organized medicine. Along with the letter, TMA staff includes a copy of the TMA Chart newsletter, so that the residents may see some of the practical efforts TMA makes on behalf of physicians. The print quantity of the newsletter is increased by approximately 2,000 for the month of the mailing. TMA is also working with component medical societies in areas with resident programs to ensure that bylaws allow for a resident membership category. When the number of resident members increases to a viable point, TMA will enact the changes necessary for the formation of a resident physician section.

Resolution No. 3-90

Subject: Dues Increase. This resolution called for a \$100 dues increase for the next five years after which the Board is directed to review the entire dues structure in detail and report back to the House of Delegates.

Action: Once adopted by the House, implementation began Jan. 1, 1991.

Resolution No. 4-90

Subject: Patient Access to Medical Office Records. This resolution dealt with the issue of physicians granting access to patient records and addressed what records should be made available, under what circumstances, and at what cost. (This resolution was a reaffirmation of Resolution No. 2-83.)

Action: Legislation was enacted during the 1990 legislative session which mirrored very closely the provisions of this resolution. The 1990 Act provides that physicians, upon written request of the patient, must provide to the patient a copy of the patient's record of a narrative summary, at the option of the M.D. The physician may render a reasonable per page charge for the record or summary and may collect the fee prior to releasing the records. Enforcement of the bill's provisions, which also track very closely with the relevant AMA ethical guidelines on this subject, rests with the Board of Medical Examiners.

Subject: Time of Submission of Resolutions to the TMA House of Delegates. This resolution when initially adopted required that all resolutions received two weeks prior to the opening of the House of Delegates would be forwarded to delegates for their review. (This resolution was a reaffirmation of Resolution No. 6-83.)

Action: This resolution has proved very effective and two mailings of resolutions are sent in advance to every member of the House of Delegates. One mailing is sent before March 1 each year in order that those societies meeting during that month would have the opportunity to review resolutions that may be of importance to them. The second mailing is two weeks prior to the opening of the House as called for in the original resolution.

Resolution No. 6-90

Subject: Impaired Physician Program Funding. This resolution called for the continuance of \$15 per each active member's dues to be allocated to funding the Association's Impaired Physician Program. (This resolution was a reaffirmation of Resolution No. 4-83.)

Action: Presently these earmarked funds support one-third of the budget for the Impaired Physician Program. The remaining two-thirds comes in the form of a contribution from the State Volunteer Mutual Insurance Company.

Resolution No. 7-90

Subject: Opposition to Prospective Payment for Physician Services to Medicare Patients Based on Diagnosis Related Groups. This resolution expresses TMA's opposition to including physician fees under diagnosis related groups. (This resolution was a reaffirmation of Resolution No. 12-83.)

Action: The previous resolution on this subject was reaffirmed.

Resolution No. 8-90

Subject: Colorectal Cancer Screening. The AMA was requested by letter to consider legislation in response to Resolution No. 8-90.

Action: The AMA, through its Council on Legislation and through its regular discussions with HCFA, considers all such changes in Medicare. According to the AMA, changes in the regulations for Medicare reimbursement would appear to be the more reasonable approach to addressing this issue.

Substitute Resolution No. 10-90

Subject: Membership Development and Retention Campaign. This resolution asked that the Board of Trustees select an appropriate mode of action and carry out a membership development and retention campaign.

Action: As directed by the Board, TMA staff worked with the AMA and component medical society executives to develop a long-term multifaceted recruitment and retention campaign. The Board approved the staff recommendations. Several of the individual components of the plan have been put into effect, with others planned for 1991 and beyond. Examples of the components enacted to date: (1) Membership Brochure (retention tool)—mailed to all members in late 1990, outlining the benefits offered by TMA. (2) Dedication Advertisement (retention tool)—placed in selected newspapers in areas where component medical society membership percentage is significantly less than that of the state. Listed members, and thanked them for their dedication to organized medicine. (3) Invitation to Join (recruitment tool)—mailed to all non-

member physicians in the state in late 1990, as identified by the state and the AMA. Urged them to join with their peers and support their profession. Response rate of 3% to 4% (average for direct mail is less than 2%). (4) Legislative Update (retention tool)—created a supplement to the *TMA Chart* newsletter dealing solely with the issues of the General Assembly which affect medicine. Mailed to all members, twice monthly, during the legislative session, beginning in January of 1991.

Among the items planned for later: Peer-to-peer phonathons (recruitment or retention); Annual "Stockholders" (Member) Report of TMA activities (retention); TMA booth at medical related conventions (recruitment).

Resolution No. 12-90

Subject: Disposition of Referred Resolutions. This resolution called for resolution sponsors to serve (at TMA expense) as special, nonvoting members of the particular Association committees that carry out the action called for in House resolutions following passage.

Action: Following last years's House of Delegates sessions, resolution sponsors or authors were invited to participate on the various committees created to carry out resolution policies. By way of example, Resolution No. 19-90 author Dr. Thomas G. Pennington assisted the Board of Medical Examiners task force in developing its licensing board legislative reform package. Similar assistance was provided by Dr. Richard M. Pearson on Resolution No. 10-90, which called for a membership development and retention campaign.

Resolution No. 13-90

Subject: TMA Annual Meeting Format Change. In response to Resolution No. 13-90, all medical specialty and allied health care organization leaders were notified on April 30, 1990 of the intent of the resolution and of plans for the Board of Trustees to decide at their July (1990) meeting how to implement the resolution. These societies and organizations were also sent a copy of the resolution and a two-page questionnaire designed to determine each organization's flexibility with scheduling at the annual meeting and their preferences for TMA's annual meeting schedule.

The summary results of all returned questionnaires were presented to the TMA Annual Meeting Committee on July 13, 1990. The committee subsequently recommended to the TMA Board of Trustees (on July 14, 1990) the following actions as a means of implementing Resolution No. 13-90: (1) that no reception be held on Wednesday evening, (2) that exhibits open at 8:30 AM on Thursday, (3) that the first session of the House of Delegates be held from 10:00 AM to 12 Noon on Thursday, (4) that reference committees of the House of Delegates meet on Thursday afternoon, beginning at 1:30 PM, (5) that the second session of the House of Delegates remain in the traditional Saturday morning time period.

Action: The Board of Trustees accepted the committee's recommendations. All appropriate organizations were then notified of these changes as planned for the April 1991 TMA annual meeting. These changes were emphasized again at the Sept. 16, 1990 joint planning meeting. All changes were subsequently incorporated into the program schedule of TMA's 156th annual meeting, April 10-13, 1991, and distributed to all TMA members the week of Jan. 28, 1991.

Resolution No. 14-90.

Subject: Student Loan Repayment. This resolution called for TMA to support deferral of repayment of federally spon-

sored student loans during residency training through its lobbying efforts.

Action: This resolution was adopted as amended and was discussed at the 1990 Tennessee congressional delegation meeting in Washington. It was also called to the attention of the AMA legislative department by correspondence.

Resolution No. 15-90

Subject: Voluntary Drug Testing of TMA Membership. This resolution, referred by the House to the Board of Trustees for study, called for the study of a voluntary, randomized, supervised, and confidential urine testing program to screen TMA members.

Action: The TMA Board of Trustees engaged in an exhaustive study of this resolution by analyzing the history and policies behind drug testing in the employment setting, the types of tests available and the respective procedures involved, and the plethora of legal implications of program implementation. The Board concluded in its report to the House that drug testing the membership, although voluntary, would subject members to undue pressure to participate from hospitals, malpractice carriers, and plaintiffs' attorneys. (For example, a physician's trial admission of nonparticipation would tend to suggest to a jury that the physician was hiding something.)

The AMA has completely backed away from a similar plan. Additionally, such a program is not feasible given the legal liabilities to TMA which would follow possible unsanctioned, inadvertent disclosure of results, the huge start-up and high maintenance costs, along with lack of clinical and storage facilities.

Resolution No. 16-90

Subject: Medicare Reimbursement for Covering Physician Services. This resolution called on TMA to work toward the repeal of the prohibition on the traditional practice of "cross coverage" under Medicare. TMA was directed to work through AMA and through its own congressional contact doctor system as a top priority.

Action: TMA corresponded directly to Tennessee's congressional delegation and directly solicited support during the annual Washington, D.C. visit by contact physicians. As a result, eight of the nine Tennessee House members cosponsored HR 4475, the "Medicare Physician Regulatory Relief Amendments of 1990," commonly known as the "anti-hassle bill." After a major grass-roots lobbying effort which resulted in a majority of the House of Representatives as cosponsors, four of its five elements, including the cross-coverage provision, were included in OBRA '90. Medicare payments will now be allowed to be made to the physician who arranges for visit services to be provided by a second physician on an occasional reciprocal basis.

Substitute Resolution No. 17-90

Subject: Regulations of Gender Selection Abortions. This resolution called for TMA to go on record as opposing abortion for the purpose of gender selection.

Action: By adoption of Substitute Resolution No. 17-90, the TMA is on record as being opposed to abortion for the purpose of gender selection. This position will remain in effect unless reaffirmed or modified during the regular annual meeting of the House of Delegates in 1997.

Resolution No. 18-90

Subject: Electronic Claims Billing. This resolution called for TMA to work with insurance companies accepting

electronic billing to develop "standardized computer protocols and software."

Action: Although this resolution has been referred to the Medical Practice Committee for consideration, TMA has not yet achieved any specific milestone in resolving this issue. The AMA is working at the national level to essentially achieve the same results. TMA will continue to support AMA's efforts.

The AMA has adopted policy which is substantially supportive of the intent of Resolution No. 18-90. AMA Policy Compendium Section 56.033 reads: "The AMA supports working with the various federal, state, local, and commercial third-party payor carriers to establish a uniform reporting system for forms and codes for medical care in the U.S." (Res. 110, A-87:347) In addition, AMA policy (Section 56.047) on Uniform Claim Form reads: "The AMA supports (1) the development and implementation of a single, national uniform claim form designed to meet the needs of the medical professional, government agencies, and third party payors; and (2) the design of a uniform data set and format for the submission of paperless claims to both government and private third-party payors."

Resolution No. 19-90

Subject: Task Force to Study Tennessee Board of Medical Examiners. This resolution concerned the creation of a task force to undertake a comprehensive study of the BME including its purpose, mandates, and mission, in order to develop a legislative package for BME reform.

Action: Prior to the Task Force's appointment by the Board of Trustees, TMA representatives met with Gov. Ned Mc-Wherter to request his approval of this reform work. In affirming the concept, he suggested that reform could include privatization if necessary. Thereafter, the Task Force studied other states' models and, after careful drafting, created a substantive reform package that would have afforded the BME more control over the use of its license fees and the ability to contract (hire and fire) its administrative staff. TMA president Hamel B. Eason then requested a second meeting with the Governor, but was informed by Administration correspondence that BME reform would have to be accomplished legislatively. The Task Force's completed report to the Board of Trustees is available for review by any TMA delegate. Please see TMA staff members for a copy.

Resolution No. 20-90

Subject: Organ Procurement Organizations. This resolution called on TMA to endorse organ, tissue, and eye donations and to encourage its membership to assist organ procurement organizations (OPOs) in their efforts. TMA was directed to join with the Tennessee Hospital Association, OPOs, and eye bank organizations to develop a consolidated plan for insuring that the donation option is offered to the families of all potential donors.

Action: In July, the Board of Trustees appointed a Special Committee on Organ Procurement to respond to this resolution. The committee, in conjunction with OPOs and the Tennessee Hospital Association, is developing a joint project with the following goals: (1) consistent visibility in front of medical professionals, (2) support of the hospital community, (3) a minimum two-year collaborative effort, (4) development of a joint theme for TMA/THA utilizing TMA/THA resources, and endorsement of a number of projects. The report of the Committee on Organ Procurement will be presented to the TMA Board of Trustees at the annual meeting in April 1991.

Resolution No. 21-90

Subject: Release of Peer Review Organization Information.

This resolution involved the ability of patients and malpractice plaintiffs to obtain, from unwary physicians and the PRO, otherwise confidential correspondence sent between the PRO and physicians under investigation. PROs conduct retrospective review of patients' care in hospitals and outpatient centers in search of quality issues. These audits, in turn, lead to investigations against which physicians must defend themselves. The resolution required the TMA to warn its members that they are not legally required to disclose the correspondence that flowed between the PRO and the MD investigatee.

Action: TMA's staff attorney mailed a detailed warning letter on this subject to the presidents of all of the component medical societies in May 1990. Thereafter, an article appeared in the June 1990 TMA Chart which provided all members with a complete discussion of the subject including an admonition against releasing such information in light of the possible malpractice liability consequences.

Resolution No. 22-90

Subject: Utilization Review in Tennessee Hospitals. This resolution called on the TMA Board of Trustees to carefully study the comprehensive utilization review (UR) guidelines for the state of Tennessee as developed by the Health Relations Group and urge their implementation as soon as possible.

Action: In July 1990, the Board voted to endorse these voluntary guidelines, which have become the basis for emerging national UR standards. Formal implementation has been delayed, due to hopes that a national clearinghouse would be developed by the American Managerial Care Review Association, which would represent a significant savings of time and effort for TMA and THA. These standards have been circulated throughout the industry and many companies state that they are now in substantial compliance. Legislation has been introduced in the Tennessee General Assembly which could be amended to codify these standards if the voluntary approach is not deemed a success.

Resolution No. 23-90

Subject: Use of Corporal Punishment in Tennessee Schools. This resolution called for TMA to go on record as opposed to corporal punishment in Tennessee schools.

Action: Passage of this resolution placed TMA on record. The General Assembly was to be urged to discourage its use and TMA was to assist educators with implementation of alternative methods of discipline. Component societies were contacted and urged to address these issues with local school districts. Copies of this resolution, with the appropriate cover letters, were sent to the Governor, the Commissioner of Education, each member of the General Assembly, the Tennessee Education Association, the Tennessee School Board Association, and component medical society presidents.

I am sure that after reading and reviewing the lengthy summaries of the many actions and considerations taken by the Board and the Executive Committee, it becomes evident that much time and effort have been expended by the members of the Board during the past year with wisdom. The members of our Association have carefully elected a group of outstanding Board members and officers, and I have been extremely impressed with the thoughtful considerations of the agenda items brought before our Board. I greatly admire each and every member of your Board and what he has contributed during the past year to the continuing improvement of the Tennessee Medical Association and the medical profession as a whole.

Also, during the year I have learned that our Association

has an exceptionally outstanding staff, and the Board is most appreciative of the thoughtful management of our Association by Mr. Hadley Williams and the fine staff that he has assembled. I hope each and every member of the Tennessee Medical Association feels that the Board, the staff, and your outstanding president, Dr. Hamel Eason, have represented your best interests throughout the year. That has certainly been our primary goal. It is with extreme pride and appreciation that I had the opportunity to serve as the chairman of your Board of Trustees.

REFERENCE COMMITTEE C—reviewed the report of the Board of Trustees and recommended that it be filed.

ACTION: FILED

Report of the Secretary-Treasurer

R. BENTON ADKINS, M.D.

The annual audit for the fiscal (and calendar) year ending December 31, 1990 has been completed and is available for review. The customary examination of Association records and accounts was conducted by Bellenfant & Miles, P.C., Certified Public Accountants, appointed by the Board of Trustees.

The attached financial reports have been extracted from the complete audit. They show the revenue and expenditures

BALANCE SHEET

	Year Ended	December 31
	1990	1989
ASSETS		
Cash	\$ 386,225	\$ 291,543
Certificates of Deposit	900,000	1,300,000
Treasury Notes	300,000	600,000
Cash on Escrow Deposit		85,000
Total Cash/Investments	\$1,586,225	\$2,276,543
Accounts Receivable—Affiliates		33,899
Interfund Notes Receivable	89,700	89,700
Accrued Interest Receivable Investment in TMA Physician	9,397	38,843
Services, Inc.	1,000	1,000
Total Current Assets	\$1,686,322	\$2,439,985
New Facilities Under Construction Land, building and improvements, equipment and autos, at cost, net of accumulated depreciation of \$241,269 in 1990 and	2,089,081	
\$191,122 in 1989	231,907	250,054
Total Assets	\$4,007,310	\$2,690,039
LIABILITIES		
Accounts Payable and		
Accrued Expenses	\$ 29,622	\$ 13,395
Dues Collection Escrow	703,144	593,750
Total Current Liabilities	732,766	607,145
Construction Loan—Third National	1,218,345	
FUND BALANCE	2,056,199	2,082,894
Total Liabilities and		
Fund Balance	\$4,007,310	\$2,690,039

during 1990 as well as the assets, liabilities, and fund balance at the end of the year.

As anticipated, a deficit of \$24,502 was incurred in 1990. As reported to this House last year a deficit has occurred in two of the last four years and was barely missed in the other two years. As was pointed out during the debate on a dues increase at this time last year, without the new headquarters building project during 1990, a dues increase of \$50 would have been necessary to take the Association out of these deficit and near deficit situations that have occurred during the last four years. The additional \$50 dues will be used to help offset construction of the new headquarters facility.

For 1991, a budget of \$2,178,500 has been approved by the Board of Trustees. This compares with last year's budget of \$1,971,530. Revenues are expected to total \$2,328,362 for the current year which will create an excess of nearly \$150,000 which will be applied towards the new construction. This amount, coupled with funds derived from the sale of property and building at 112 Louise Avenue in Nashville of \$520,000

STATEMENT OF REVENUE, EXPENSES, AND FUND BALANCE

Vear Ended December 31

	Year Ended	December 31
	1990	1989
REVENUE		
Membership dues (net of \$98,750		
to Journal for 1990 and		
\$77,764 for 1989)	\$1,162,596	\$ 992,844
Annual Meeting—Exhibits	44,250	45,000
Annual Meeting—Tickets	10,180	9,510
Investment Income	128,134	163,426
TMA Physician Services—Dividends	75,000	105,420
AMA Collection Fees	23,851	7,363
Impaired Physician Grant	144,000	144,000
Medicare Access Program Grant	63,587	144,000
Specialty Society Administration	43,326	41,085
Miscellaneous	3,750	· ·
		5,060
Total Revenue	\$1,698,674	\$1,408,288
EXPENSES		
Administrative	\$ 673,518	\$ 569,527
	+,	
Administrative Support & Services	30,024	35,260
Travel—Staff	49,820	44,183
Officers	81,169	86,948
Impaired Physician Program	218,063	218,017
Committee Expense	30,404	20,869
Legislative Committee	32,326	38,982
Continuing Medical Education	14,136	3,722
Annual Meeting	54,270	56,342
Taxes	43,399	41,310
Headquarters Expense	28,199	33,232
Student Education Fund	122,832	122,706
Specialty Society Administration	50,832	48,420
Other Organizations	20,149	12,191
Care Program	178,225	
Medicare Access Program Grant	63,587	8,747
Depreciation	29,848	32,571
Contingencies		8,403
Total Expenses	\$1,720,801	\$1,381,430
Excess of Revenue Over Expenses		
Before Journal	(22,127)	26,858
Excess Journal Expenses	(4,568)	(19,458)
•		7,400
Excess of Revenue Over Expenses FUND BALANCE	(26,695)	,
Beginning of Year	2,082,894	2,075,494
End of Year	\$2,056,199	\$2,082,894
	===	

will retire approximately one-half of the construction loan on the new headquarters building.

Close monitoring of revenues and expenditures will be required for the foreseeable future in order to enable the Association to retire all outstanding loans and replenish reserves. I wish to express my appreciation to the Board of Trustees and to the Finance Committee for their assistance throughout the past year.

JOURNAL INCOME AND EXPENSES Year Ended December 31, 1990

	Total	Readership	Advertising
INCOME		•	
Allocation of Dues	\$ 98,750	\$ 98,750	\$ —
Advertising	76,418	_	76,418
Subscriptions	3,214	3,214	_
Total Income	\$178,382	\$101,964	\$ 76,418
DIRECT EXPENSES	S		
Clerical Assistance	\$ 600	\$ 600	\$ —
Clipping Services	2,733	2,733	_
Editor and Board	3,000	3,000	_
Printing and Mailing	110,479	74,352	36,127
Fringe Benefits	4,126	2,063	2,063
Payroll Taxes	1,477	739	738
Salaries	25,750	12,875	12,875
	\$ 148,165	\$ 96,362	\$ 51,803
OVERHEAD			
Salaries	\$ 24,107	\$ 16,072	\$ 8,035
Employee Benefits	5,382	3,588	1,794
Attorney Retainer	1,058	705	353
Auditing Expense	600	400	200
Social Security Taxes	1,905	1,270	635
Unemployment			
Compensation	194	129	65
Custodial Service	540	360	180
Utilities	999	666	333
	\$ 34,785	\$ 23,190	\$ 11,595
Total Expenses	\$ 182,950	\$ 119,552	\$ 63,398
JOURNAL INCOME			
(Loss)	(\$ 4,568)	(\$ 17,588)	\$ 13,020

REFERENCE COMMITTEE C—reviewed the report of the secretary-treasurer and recommended that it be filed.

ACTION: FILED

Report of the Judicial Council

FRED RALSTON JR., M.D., Chairman

The Judicial Council of the Tennessee Medical Association has not been required to meet in full session since April 7, 1990, when it met in Knoxville. Fortunately, most ethical issues are resolved on a local level by the component societies,

and the Council becomes involved only on appeal of a local society decision.

During the past year the Council has received one patient's appeal of a local component society's decision concerning an allegation of unethical conduct. An investigation is proceeding as outlined by TMA Bylaws. The chairman has appointed an investigator from the Council. The investigator's final evidentiary report is expected in the near future. Once his report is submitted, the Council will hold a hearing pursuant to both the procedures set forth under TMA Bylaws and the due process requirements of the Federal Health Care Quality Improvement Act (HCQIA).

The Council is maintaining strict confidentiality over both the subject matter of the case and the names of the individuals involved. Confidentiality is legislatively mandated under Tennessee law. All documents and information generated by the peer review process are confidential.

No other items have been referred to the Council during the past year. Our component societies continue to do an excellent job interpreting and handling ethical issues involving their members. Those who work at the local level are to be commended for their efforts.

As chairman, I wish to thank all of the members of the Judicial Council for their willingness to serve the TMA in this important capacity. I would also like to thank Mr. Don Alexander, TMA staff liaison, and Mr. Marc Overlock, TMA staff attorney, for their invaluable assistance.

REFERENCE COMMITTEE C—reviewed the report of the Judicial Council and recommended that it be filed.

ACTION: FILED

Report of the Executive Director

MR. L. HADLEY WILLIAMS

TMA set the tone for this new decade with a wide variety of activities performed during 1990. Some of the top activities of 1990, along with previews of anticipated directions for 1991, included an expanded public relations program via the House-approved CARE program; continued efforts towards enrolling senior citizens and volunteer TMA physicians in the Tennessee Medicare Access Program; construction of a new headquarters facility designed to serve the needs of TMA and its members well into the next century; and endorsement and support of the AMA's Health Access America program outlined in this report last April.

Medical plan costs have jumped 46% in the past two years according to a recent survey of American businesses. Over 2,000 employers surveyed indicated that the cost of employer medical plans averaged \$3,161 per employee in 1990, compared to \$2,160 reported two years earlier. The report concluded that if health costs continued to increase at the current rate, the annual cost of providing medical benefits would exceed \$22,000 per worker by the year 2000.

Health Access America began with a single premise—that all Americans need access to high quality health care services

at affordable prices. Medical price inflation, large catastrophic claims, and increased use of mental health and substance abuse benefits were cited by the employers as the three major factors contributing to the continued rise in health costs. Authors of the business study concluded that the problem is just too big to be solved through cost sharing and have been urging Congress to overhaul the nation's health care system. In addition to costs being incurred by employers, an estimated 37 million Americans have no health insurance at all and another 50 million may be underinsured.

The AMA's plan is based on a guiding principle that reform should be built on the strengths of the current system, which has always been responsive to consumer demand. Government-controlled health systems could not match these strengths. The AMA's plan would spring directly from patient needs and the needs of those who had insufficient access to health care. AMA's intention is to develop consensus among government and the public, business, and labor, by bringing issues to the table in open dialog. Throughout 1990, physicians have met with Congress, the press, health care provider organizations, and business and union leaders, sharing the tenets of Health Access America. Introduced March 7, 1990 and detailed in this report last year, the proposal was introduced in a strong voice through a comprehensive, multi-tiered communications effort to bring to the forefront national health issues that point to the need for reform.

The year 1991 will be a year to build on the successes achieved in 1990 through increased awareness and broader participation. It will be a year to advance the proposal through new initiatives. A major conference was held in Washington last month with key medical, business, government, and labor leaders in the debate on health care reform. AMA plans to work steadily toward gaining support by monitoring the legislative environment, and taking steps to maximize the proposal's potential for implementation. Since this reform proposal is the only viable plan designed to respond to all the issues of health care reform, I urge each member to review the 16 points of the plan that have been endorsed by the TMA Board of Trustees. From this effort, fundamental change in our health care system may very well take place in the near future.

TMA MEMBERSHIP REPORT As of December 31, 1990

	1990	1989	1988	1987	1986
Dues Paying Active					
Members	5,125	5,057	5,019	4,981	4,911
Dues Paying Resident					
Members	76	51	77	87	71
Dues Exempt Members	1,214	1,171	1,018	920	830
Veteran Status 536					
Military, Disabled,					
and Retired346					
Student332					
TOTAL	6,415	6,279	6,114	5,988	5,812
Deaths	61	61	44	43	41

AMA Members from Tennessee:

TMA Dues Paying and Exempt 4,678
AMA Direct Members 1,506
TOTAL AMA MEMBERS 6,184

73% of TMA members are AMA members

I also urge members of the House to review the report of the secretary-treasurer which outlines the financial status of TMA. Although most delegates felt the \$100 dues increase adopted last April was for the purpose of constructing a new headquarters facility, more than 50% of the increase was necessary to maintain current TMA programs and services and to avoid sizable deficits in the coming years that would deplete reserves unless services were curtailed or eliminated. It is anticipated that the new headquarters can be financed with the increased dues monies and the Board has been directed to fully study all aspects of the dues structure and report their recommendations to the House in 1995. Every effort is being utilized to maintain prudent and sound financial practices during this period. Membership growth as well as membership retention is an ongoing concern. Continued support by the membership during this period is most appreciated.

As is customary, I am submitting the membership report (Table), which outlines our current membership numbers in various categories as well as those for the past four years for comparison purposes.

I would like to commend the staff for their dedication and devotion to duty during the past year, and I would like to express my appreciation to each of the officers and members of the Board of Trustees for the many hours they have contributed on the part of the profession and for the leadership provided during the past 12 months.

Dr. Hamel Eason has unselfishly provided the necessary direction and leadership and has made himself available on many occasions, often at the expense of his family and practice. We look forward to another productive year with Dr. Howard Salyer at the helm.

REFERENCE COMMITTEE C-reviewed the report of the executive director and recommended that it be filed.

ACTION: FILED

Committee Reports

The following standing and special committees made annual reports to the House of Delegates:

- -Committee on Scientific Affairs
- —Committee on Legislation
- -Committee on Governmental Medical Services
- -Committee on Constitution and Bylaws
- —Committee on Hospitals
- -Peer Review Committee
- —Committee on Communications and Public Service
- —Interprofessional Liaison Committee
- —Committee on Continuing Medical Education
- —Impaired Physician Peer Review Committee
- -Committee on Rural and Community Health
- -Committee on Medicine and Religion
- -Committee on Emergency Medical Services
- -Advisory Committee to TMA Auxiliary
- -Committee on Maternal and Child Care
- -Primary Care Liaison Committee
- —Geriatrics Committee
- —Committee on Medical Practice
- —Committee on HIV Infection and AIDS
- —Committee on Organ Procurement

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		•	•		
†Annual Fees	\$40 Gold; \$20 Silver (Fee waived first year)	Grace Period For Repayment Of Balances For Purchases	At least 25 Days from statement closing date	Advances, And Fees For Paying	Transaction Fee For Bank and ATM Cash Advances. 2% of each Cash Advance, S2 Minimum, S25 Maximum; Transaction Fee For Access Check Cash Advances:
AnnualPercentage Rate	16.9%	Method of Computing the Balance for Purchases	Average Daily Balance (including new purchases)		1% of each Cash Advance, \$2 Minimum, \$10 Maximum. Late Payment Fee: \$15, Over-the-Credit-Limit Fee, \$15.

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president's page



HOWARD L. SALYER

You Make It Work

Since the Tennessee Medical Association was formed in 1830, we have seen a tremendous growth in not only our organization but also the 51 local medical societies from all across Tennessee. These organizations play a role in helping to maintain and improve the practice of medicine. To all of you who are members of the TMA, the local associations and overall supporters of organized medicine, I extend my heartfelt thanks.

I am offering my thanks because, without the support and participation of members of organized medicine, these associations could not continue to exist. As many of you have already seen, organized medicine plays a key role in bringing issues to the forefront—issues that might otherwise go unnoticed by legislators, other government agencies, and society at large. However, we—meaning the field of organized medicine—would not be able to address these issues if someone did not speak up and bring them to the attention of our delegates to the state and national legislatures.

The positive results of organized medicine cannot be underestimated. For example, the doctor/patient relationship is being altered to one of provider/consumer as a result of third-party payers, contract medicine, government sanctions, and peer review. Through these associations, we have been able to develop legislation and programs that help protect the integrity of the doctor/patient relationship, minimize interference in the way we practice medicine, and enhance our profession overall.

Of course, there are a number of physicians who are not involved in these associations, but the programs and issues that are addressed through these groups benefit *all* physicians, not just the ones who actively participate. Just think how much stronger these organizations could be, how many more goals could be accomplished, how our profession could be even further strengthened, if *all* physicians joined forces together.

Many of you have been involved in the TMA and AMA for many, many years, and your support of these organizations is deeply appreciated. For those of you who are just starting to become involved in organized medicine, I want to urge you to become very involved in the local, state, and national associations. Speak up and let your voice be heard—your input and participation is vital to the creation, development, and implementation of new programs and services as well as to the maintenance of those already in place. And if you know physicians who are not members of these organizations, urge them to join.

Remember, you make it work.

Hal h Salyer 4. J.

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JUNE, 1991

editorials

God Pity the Sailor on a Night Like This

The news media are generally not bad at reporting things that happen, even though sometimes they may not report them exactly the way they happened. What the media are better at is reporting what they think is the meaning of whatever it was that happened, even though that is generally not what those who consult the media consult them for; but that's what they get, anyway. What the media are generally best at, though, is calling things to your memory that they think you ought to remember, in hopes that you can be brought around to sharing their preconceived notions.

Consider this. Have you ever noticed that in almost any given item in the newspaper, after having been presented a couple of brief paragraphs about the event itself, the reader is treated to several paragraphs—as many as needed—about what, at least theoretically, led up to it; that refresher course may or may not be accurate, but since you won't yourself likely remember those past events, at least not very clearly, you have either to assume or to discount their accuracy. I can't help you there.

After that, one is regaled by several paragraphs editorializing, in the reporter's own inimitable fashion, about what he thinks the event will mean in the lives of his readers. Finally, if you are lucky, and have any strength left, you can turn to some page near the back of the paper and find out some of the details of what really happened this time. The reporter may, of course, have become worn out himself by then, or he may just assume he has already told you all you need to know about this particular event, believing as he does that what he has told you about what has gone on before and what he thinks of all this are really the more important, and so you may never find out anything else—at least not here. When the going is dull, such things pad the copy and rest the reporter's brain. Come on now. I mean, after all, who the hell cares, anyway?

Another thing of importance in the publications racket is that once you've got a good thing going, you don't let up. As an example, the video tape of the L.A. police beating should be good for at least a few more weeks yet. With any luck, by the time you read this we'll be shed of it, though I'm not counting on it. I'm really not sure what the media are trying to prove, but what they wind up proving may not be what they had intended. What I think they set out to prove, and are hammering away at, is that police brutality is rampant, and we need to do something about it. Taken to its logical conclusion, what they seem to be implying is that we need to do away with police altogether, or at least pull out all their teeth, which will accomplish the same thing, since I can't imagine that any man or woman who would make an effective police officer would expose himself to what police officers are regularly subjected to—from both the criminals and the press—without being allowed to strike back, with force.

I have been told by my friends who have been in combat that it's hard to kill your first man; after that, they say, it gets easier and easier. If you happened to see one of your buddies fall before you have had the initial opportunity, retaliation comes to you naturally, as does the immediacy of the situation. Like President Bush, and I'm sure nearly everybody else, and maybe L.A. Police Chief Gates most of all, though maybe for somewhat different reasons, I was pretty sickened by what I saw on the tape—the first time I saw it. After about the hundredth time I began fantasizing that the abused was the analyst responsible for that hundredth viewing, and it got to be not nearly so bad.

In characteristic fashion, the press keeps reminding us about what it's like in police states, invoking the shades of Hitler's Gestapo and Stalin's KGB (which, incidentally, hasn't changed much through the subsequent years). Those really are not comparable situations at all. Victims of the Gestapo and KGB suffered (suffer) for harboring dissident political views, belonging to a race marked for extinction, or having the misfortune to be malformed, disfigured, or ailing. Without excusing the police in L.A., who at the very least can be accused of overreacting, a fair-minded press would have to recognize that the beaten man was not just a misguided soul who had led the police on a merry high-speed chase, but a convicted felon on parole. This is a bit of information that has never been mentioned very prominently. To discover it you have to look for it. I suspect that we will never know exactly what happened. There is certainly pictorial evidence of excessive force and enormous physical damage to the beaten man. The L.A.P.D. is, naturally, doing its best to minimize the damage to itself, and the media to sell more newspapers or whatever their particular commodity might be, which means maximizing the incident. With such rabid competition from the two poles, the middle becomes a lost cause and fact-finding a tour-de-force, or maybe farce.

It is certainly true that the line between living in safety under the law and living in terror in a police state may be exceedingly thin. But the corollary that gets little attention is that there is an equally thin line between living in safety under the law and living in terror in an anarchy. I personally have a lot more concern in that direction than in the other. We are presently living in what I find to be the uncomfortable situation of having the criminal get all the breaks, allowing little breathing room for law enforcement, and no consideration at all to the victim, either actual or potential. One of our own state's elected members of the United States Congress

raised some hackles recently when he advised parents to keep their children out of our nation's capitol. My question is, why should any conscientious representative of his people not have? There are few more dangerous places in the world this side of Kuwait.

The nauseatingly thoroughly publicized event in Los Angeles was unquestionably a reflection of police frustration, which is extreme among police forces almost everywhere. Apprehending a criminal is the easy part. Bringing him to justice is next to impossible, and only a very small minority of those who get that far are ever punished at all. The chances are only about one in eight that a criminal will ever do time, regardless of the crime. And yet we continue to be assured that our criminal justice system works. An apprehended criminal will in most instances be back on the streets before the arresting officer is, like as not trying to kill his captor, deterred only by the fear of retribution. Remove that fear, and anarchy reigns. It is my firmly held conviction that revival of the public whipping post and the stocks would clear a lot of heads and at the same time relieve overcrowding of the prisons. But we are too civilized to punish the criminals; instead we punish only the victims and their designated protectors.

Fortunately, we now have a Supreme Court whose majority appear, for the first time in more than half a century, to hold the safety of the citizenry of the United States in higher regard than the tender sensibilities of the criminal element. The gravest possible danger to our citizens was posed by the Miranda ruling, under which the police have been forced to operate for decades. By virtue of that ruling, the rights of the alleged criminal superseded any rights the aggrieved might have; it carried the full weight of the Department of Justice. I wonder if it was sheer coincidence that the ruling of the Supreme Court that coerced confessions are not necessarily inadmissible in court followed so close on the heels of the almost universal vilification of our police system by the news media.

One evening back in the days when there were still passenger trains—during World War II to be precise—the Dixie Flyer with me on board was rocketing along between Nashville and Chattanooga, meanwhile pausing at Tullahoma, home of Camp Forrest, to take on a load of liberty-bound soldiers. The train was already overloaded, and in fact I was sitting in the aisle on my suitcase. All passageways had become virtually impassible, when a lone sailor appeared, trying to pick his way along the aisle of the lurching car through a sea of olive drab. As he came abreast of me, I heard him mutter, "God pity a sailor

on a night like this." Nonetheless, all of us on board assumed that despite inconveniences, the train would eventually get us to where we intended to go, because we had confidence that the engineer was competent and the equipment equal to the task, and that everybody on the train had in mind a destination that lay along the train's published route.

It has been a long time since I have had any such confidence in our ship of state. In the first place, I have been reminded of the old joke about the three drunks in a car, one of whom, on being questioned as to why he had just turned to the right, answered, "Oh, am I drivin"? I thought you wush." I have often been uncertain as to who was driving, where we were going, and whether or not anybody even knew. At other times, when I thought I knew all those things, I have been tempted to call out, "Stop the train. I want to get off." Right now, at least so far as law enforcement is concerned—excepting, of course, an occasional episode of police overreaction—I think we (I and the country) might be headed in the same direction, provided a few remaining kinks can be ironed out. Why, at a time when there is so much commotion, do I think that?

Well, though the rights of the individual should, indeed must, be protected, it is a grave injustice that such be protected at all costs—for example, at the expense of all the rest of the citizens combined. That is where we have been heading ever since Earl Warren began driving the train as Chief Justice of the United States Supreme Court. There are indications that there is now a proper balance in our future, thanks to a Court that appears to understand the difference between liberty and license.

Even though on some night an occasional sailor might have to suffer some inconvenience, or even occasionally an injustice, it cannot continue being allowed to happen the other way around, with a lone sailor streaking wantonly and unimpeded through the aisles, leaving carnage in his wake. At the time I heard the sailor make his utterance, no one would even have considered doing such a thing, knowing he could not get away with it. Now not only might they consider it; they regularly do it, believing, with good reason, that they can.

With any luck, L.A. will be blessed with Chief Gates at the head of its police force for many more years to come; with even more luck, the country would have several hundred Gates clones scattered about. Better still, the Supreme Court will allow them to protect the citizens and the courts to punish the criminals. There is a glimmer of hope for lawabiding citizens.

J.B.T.

Personal and Confidential

Not long ago, while a friend and I were discussing Rio de Janeiro, in the course of the conversation I mentioned that I had never been there. When he allowed as how I really should go, my only reply was that you can get your pocket picked there. "You know the answer to that, don't you?" he asked. "Sure," I said. "Don't carry anything in it."

That was the answer he was looking for, but that won't affect the pocket-picking process—only the results. You can, of course, get your pocket picked anywhere, so that it's a good idea never to carry much of anything, and to have that well protected. Just a word of advice: You can't watch all your pockets at once, and you can't count on the protection of your own hand in it to keep another's out. I got my pocket picked in Rome by a crowd of little girls who were jostling all about me selling papers a causa di Papa; they managed to tear my shirt in the process, and my protecting hand came out of my right hand pants pocket to protect other things. After the commotion died down, one cute little ragamuffin held out a dingy hand with, "Signor, you drop." In that small hand were the lens cap of my camera, my comb, a \$20 traveler's check, and a few small coins—everything that had been in the pocket. When I thanked her, she said, "Signor, you geev reward?" It cost me only 500 lira (less than 10 cents) to get my pocket picked, which I thought a bargain.

More than being outraged, I was amused. At the same time, though, I was more than a little saddened by the extreme youth of the little miscreants. None of them could have been more than 10 or 12 years old. The concierge in the Grand Hotel Flora assured me that they start out much younger than that, and that by age 12 they are already accomplished thieves.

At least they're up front about it—only stealthy. In the film *Pretty Woman*, rich takeover tycoon Edward Lewis tells Vivian, his "beck and call" girl, that they are very similar creatures: "We both screw people for money," he says. Precisely. But there is an obvious difference: as with the Roman gamin, one of them is forthright about her intentions, and the other devious, though, as he observes, perfectly legal. The law is all mixed up, like the public generally mistakenly equating immorality with only sex (usually illicit, but not always); I'll therefore defer the decision as to morality of the situation under discussion to your discretion and tender mercies. You know, though, don't you, which is the one who will give you the business?

In case you need a hint, I'll give you one. My mail the other day included a business-sized en-

velope, sent first class and marked "Personal and Confidential." Now, such a designation indicates to me that what is in there is important, and what's more, is meant for my eyes alone. Imagine, then, my chagrin, though not, I must confess, my astonishment, to find the envelope contained a simple advertisement for a medical answering service that I am certain the company has advertised widely, both publicly and in envelopes that like mine were dishonestly marked personal and confidential. Though that does accomplish their mission of getting the envelope past the secretaries to their intended target, it does it at the expense of the target's confidence, and besides that, like the little boy who cried "Wolf!" one would think it not unlikely in the long run to prove counterproductive.

Or at least so I would think one would think. On the other hand, maybe it is the experience of the marketing people that the ruse gains the company business. Maybe, unlike me, the other recipients think, "My! How innovative of them. They could do a job for me." If that is their experience, and there is reason aplenty for suspecting that it might be, it is indeed a sad commentary on our present parlous times. My own reaction would be, "My! They could do a job on me." And I suspect they would—and not just on me, either. But maybe it is just that I have a suspicious nature, and theirs is not a certified dereliction, but just a harmless diversion—sort of like being a hooker.

My dictionary gives as its second definition of hooker: "n. 1: One that hooks. 2: Slang. A prostitute." If on the basis of definition I were asked, using Edward and Vivian as paradigms, to explain the difference between the two of them, ignoring externals and their relationship to the law, for the life of me I could not. Which is what Edward Lewis confessed.

So much for the medical answering service. "Personal and Confidential" indeed!

J.B.T.



Horton Gee DuBard, age 83. Died April 14, 1991. Graduate of University of Tennessee College of Medicine. Member of Memphis-Shelby County Medical Society.

Joseph W. Graves, age 66. Died March 26, 1991. Graduate of Vanderbilt University School of Medicine. Member of Chattanooga-Hamilton County Medical Society.

Raymond A. Johnson, age 75. Died April 2, 1991. Graduate of University of Minnesota Medical School. Member of Roane-Anderson County Medical Society.

Lowry Dale Kirby, age 64. Died April 8, 1991. Graduate of University of Tennessee College of Medicine. Member of Nashville Academy of Medicine.

Joseph Hanley Sayers, age 78. Died March 27, 1991. Graduate of Vanderbilt University School of Medicine. Member of Nashville Academy of Medicine.

new members

The *Journal* takes this opportunity to welcome these new members to the Tennessee Medical Association.

BLOUNT COUNTY MEDICAL SOCIETY David Grant Newman, M.D., Maryville

BRADLEY COUNTY MEDICAL SOCIETY Ralph E. deAyala, M.D., Cleveland

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY David H. Drucker, M.D., Chattanooga

David II. Drucker, III.D., Chattanooga

COFFEE COUNTY MEDICAL SOCIETY Michael J. Renner, M.D., Tullahoma

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

David G. Burleson, M.D., Jackson Robert Johnson Gilroy Jr., M.D., Jackson

KNOXVILLE ACADEMY OF MEDICINE

Thomas K. Barefoot, M.D., Knoxville Michael D. Hightower, M.D., Knoxville Randy M. Kiriluk, M.D., Seymour Robert J. Shay, M.D., Knoxville George Walton Smith Jr., M.D., Knoxville

MAURY COUNTY MEDICAL SOCIETY

Satish K. Sondhi, M.D., Columbia Lynn Wright, M.D., Columbia

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Mark L. Allen, M.D., Memphis
Elaine G. Bandura, M.D., Memphis
Maria Teresa Brooks, M.D., Lakeland
John Thornton Foust, M.D., Memphis
Arthur Stacey Headley, M.D., Memphis
Mary Leigh Keegan, M.D., Memphis
Michael Burch Morrison, M.D., Memphis
Barry A. Ripps, M.D., Memphis
B. Jeffrey Sanders, M.D., Memphis
Kurt Patrick Schropp, M.D., Memphis
Rome Sherrod II, M.D., Memphis
William Allen Smith Jr., M.D., Memphis
Jeffrey Clark Smith, M.D., Memphis
Jon Phillip Spiers, M.D., Memphis

Susan Taylor, M.D., Memphis Hugh Hernes Williams, M.D., Germantown

NASHVILLE ACADEMY OF MEDICINE

David Norman Bolus Jr., M.D., Nashville William Keith DeBell Sr., M.D., Hermitage John Allen Strupp, M.D., Nashville

WASHINGTON-UNICOI-JOHNSON COUNTY MEDICAL ASSOCIATION

Stephen Smith Able, M.D., Johnson City James Evans, M.D., Johnson City Mary Jane Gibson M.D., Johnson City Alan N. McCartt, M.D., Johnson City

announcements

CALENDAR OF MEETINGS

NATIONAL

July 24-28	National Medical and Dental Association-
	Madden's on Gull Lake, Brainerd, Minn.
July 25-28	American Orthopaedic Foot and Ankle
	Society—Marriott Copley Place, Boston
July 25-Aug. 1	National Medical Association—Indianapolis
July 26-27	American College of Medical Quality—
	Orlando
July 29-31	American Hospital Association—Anaheim,
-	Calif.
Aug. 10-16	Society of Magnetic Resonance in Medicine
	Inc (Scientific Meeting and Exhibition)—San
	Francisco Hilton and Towers
Aug. 16-20	American Society for Pharmacology and Ex-
· ·	perimental Therapeutics—Town & Country,
	San Diego

TMA Members Receive AMA Physician's Recognition Award

The following TMA members qualified for the AMA Physician's Recognition Award during March 1991. This list, supplied by the AMA, does not include members who reside in other states.

Physicians can receive the PRA certificate valid for one, two, or three years. For the one-year award, physicians report 50 hours of continuing medical education, including 20 hours of Category 1; for the two-year award, physicians report 100 hours of CME, including 40 hours of Category 1; for the three-year award, physicians report 150 hours of CME, 60 of which are Category 1.

Louis A. Cancellaro, M.D., Johnson City Charles M. Cowden, M.D., Hendersonville Ronald F. Kourany, M.D., Nashville Allen D. Lewis, M.D., Chattanooga Dewey G. Nemec, M.D., Nashville Clyde G. Smith, M.D., Memphis John M. Wilson, M.D., Memphis David R. Yates, M.D., Hermitage

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History of the Tennessee Medical Association 1930-1980



Written By R.H. Kampmeier, M.D.



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JULY, 1991 VOL. 84, NO. 7

Pasteurella Multocida Infection In a Patient with AIDS

DAVID BAKER, M.D. and GRAY C. STAHLMAN, M.D.

Case Report

A 56-year-old homosexual man with acquired immunodeficiency syndrome (AIDS) was admitted to the Nashville Veterans Administration Hospital (NVAH) on Sept. 17, 1989 with a chief complaint of acute onset of fever, shaking chills, and a painful right arm for about 24 hours. He was known to be HIV positive for five years, and had had erosive candida esophagitis, disseminated TB, cytomegalovirus (CMV) retinitis, cryptosporidial diarrhea, and chronic pancytopenia requiring periodic blood product transfusion. Two weeks before this admission he had been discharged from NVAH having received platelets. His admission medications included rifampin, isoniazid, pyridoxine, ketoconazole, cimetidine, and nebulized monthly pentamidine; he was allergic to penicillin and sulfa drugs.

On admission the patient appeared in mild distress, complaining of fever, chills, nausea, vomiting, bilateral retro-orbital headache, and an exquisitely painful and erythematous area on his right forearm, which he identified as his last intravenous access site. He stated that the pain and erythema streaked up the medial aspect of his arm to the axilla. He denied any recent exposure history, cough, shortness of breath, diarrhea, or discharge from the affected area. His oral temperature was 100.6°F, pulse 80/min, respiratory rate 16/min, and blood pressure 120/70 mm Hg. His physical examination was unremarkable except for retinal exudates in his right eye consistent with CMV retinitis. Examination of his right arm revealed an erythematous, warm, and markedly tender area on the dorsal forearm, with erythematous streaks mainly along the medial aspect clearly to the axilla. The previous intravenous site had a small eschar, but no discharge. He had tender lymphadenopathy in the right axilla; no other nodes were noted. Chest x-ray and ECG were normal. His WBC count was 1,200/cu mm, with 50% polymorphonuclear leukocytes, 30%

monocytes, and 10% lymphocytes. The hematocrit was 31% and platelet count was 17,000/cu mm.

Therapy was started with vancomycin (1 gm IV every 12 hours) and gentamicin (120 mg IV loading dose and 100 mg IV every eight hours). The second hospital day he remained febrile and unchanged. Two of four pretreatment blood cultures subsequently grew a pleomorphic gram-negative rod. Because of his compromised immune status and a desire for better gram-negative coverage, imipenem (1 gm IV every six hours) was added, after which he rapidly defervesced and showed clinical improvement. On the third hospital day the organism was identified as Pasteurella multocida, sensitive to chloramphenicol, penicillin, tetracycline, and cephalothin. The previous antibiotics were discontinued, and having a known penicillin allergy he was given cefotaxime (1 gm IV every eight hours). He remained afebrile, with continued marked clinical improvement, and was discharged on the sixth hospital day.

Upon further questioning he revealed that he indeed owned a cat; he admitted that he and his cat were quite affectionate and that his cat likely had licked the intravenous site. He denied recent scratches or bites. Culture of his skin and nares were both negative for *P. multocida*.

Discussion

Pasteurella is a small, gram-negative, bipolar staining coccobacillus distantly related to Yersinia; it is commonly found as a saprophyte in the digestive and respiratory tract of healthy cats, dogs, and other wild mammals and birds. Pasteurellae are nonmotile aerobes or facultative anaerobes that grow readily on ordinary media at 37°C. They are all oxidase-positive, catalase-positive, and do not grow on Mackonkey's agar.

Although *Pasteurella* may be a cause of cholera in chickens and of hemorrhagic septicemia in cattle

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PASTEURELLA MULTOCIDA WITH AIDS/Baker

and other animals,² it usually exists in a carrier state in the animal host and does not cause disease.¹ The frequency of carriage in domesticated cats, for example, has been reported as 67%, whereas in dogs it has been shown to be near 57%.³ Infection in man by *Pasteurella* species most often involves *P. multocida*, commonly found as part of the oral flora of domesticated cats and dogs. Tindal and Harrison, along with Lee and Buhr, showed that 7% to 17% of patients reporting to a hospital with animal bites or scratches were found to be harboring *P. multocida* infections.⁴ Although dog bite injuries are the most common to be seen in the hospital emergency room, the majority of immunocompetent human *P. multocida* infections are shown to come from exposure to the pet cat.³

P. multocida infections are also seen with non-bite animal exposures. These most often involve (in decreasing order of frequency) the respiratory tract, the central nervous system, intra-abdominal sites, and septicemia, usually in persons with frequent and heavy animal exposure.⁵ Additionally, P. multocida has been implicated as the etiologic agent of a variety of disease states, including appendicitis, septic arthritis, osteomyelitis, sinusitis, mastoiditis, otitis media, peritonsillar abscess, meningitis, cerebral abscess, cervicitis, vaginitis, pyelonephritis, renal abscess, conjunctivitis, pericarditis, chorioamnionitis, spontaneous peritonitis, and endocarditis.^{2,6,7} It has also been isolated from patients with bronchitis, bronchiectasis, pneumonia, lung abscess, and empyema.^{2,8} Acute epiglottitis due to *P. multocida* has also been reported.9

Wound infections resulting from animal bites or scratches are often extremely painful, and are commonly surrounded by cellulitis. The clinical signs of infection are expressed rapidly, often within a few hours to several days of exposure, although the wound is not clinically unique. Tender regional lymphadenopathy is seen in up to 30% of patients, and low grade fever and suppuration are common.¹

Penicillin is the drug of choice for treatment of *P. multocida* infections in man. Penicillin V 500 mg orally every six hours or tetracycline 500 mg orally every six hours for seven to ten days is usually adequate. For septicemia or serious deep infections, penicillin G 400,000 to 2,000,000 units IV every four hours or cephalothin 1 to 2 gm IV every four hours for at least two weeks is recommended. Surgical drainage of infected deep wounds is indicated, and a prolonged course of intravenous antibiotic therapy is required, particularly in cases of endocarditis and osteomyelitis.¹⁰

P. multocida bacteremia usually arises in patients with lowered resistance to infection (COPD, diabetes mellitus, corticosteroid use, and liver disease). 11 Our review of the literature indicated this patient to represent the first reported case of P. multocida infection associated with AIDS. Our patient had a very strong history of cat exposure, and his infection most likely resulted from his cat licking a small break in his skin from a recent intravenous access site. This case also raises a question of whether AIDS patients with P. multocida infection and allergy to penicillin (as in this case) should be treated with a static drug such as tetracycline. One could only speculate, but we would recommend using a third generation cephalosporin in such patients.

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Primary Testicular Lymphoma With Central Nervous System Involvement

RONALD H. LANDS, M.D.; FLORA SHOAF, M.D.; and ANAND KARNAD, M.D.

Introduction

Primary non-Hodgkin's lymphoma (NHL) of the testis is the most common tumor involving the testicle in men over 60 years of age. It is known to be associated with progression or relapse in extranodal sites including the other testicle, Waldeyer's ring, skin, and central nervous system (CNS). This case is an unusual presentation of NHL simultaneously involving the testicle and CNS.

Case Report

A 69-year-old white man who had a normal annual physical examination six weeks earlier gave a history of abrupt onset of anorexia, persistent nausea, early satiety, relentless fatigue, and pruritus. He denied fever or sweats, but he gave evidence of a 20-lb weight loss. There was no mention of testicular swelling or discomfort. Upper endoscopy revealed only mild duodenitis. CT scan of the upper abdomen revealed a 4×4 -cm left perirenal mass, fine needle aspiration of which revealed large cells with scant cytoplasm and large nuclei with prominent nucleoli and fine chromatin. They were thought to be malignant cells of lymphoid origin. He was then referred to an oncologist for further management.

His physical examination was most notable for the absence of lymphadenopathy or abdominal organomegaly. A firm, nontender, 3×4-cm left testicular mass was palpated and an orchiectomy was performed through an inguinal incision. Sections of the testis showed almost complete replacement of the parenchyma by large cells with sparse cytoplasm, large round to oval nuclei with vesicular chromatin distribution, and multiple peripheral nucleoli. Miotic figures were frequent (Fig. 1). Immunoperoxidase staining showed the cells to be of B-cell lineage, consistent with the diagnosis of diffuse large cell lymphoma.

A complete blood count and differential were normal, and an examination of the blood smear showed no abnormal cells. Bilateral bone marrow aspirates with biopsies were without evidence of tumor. A chemistry profile revealed a serum lactate dehydrogenase level of 370 U/L. CT scan of the chest, abdomen, and pelvis revealed no abnormalities other than the mass in the left perirenal area; CT scan and MRI of the brain were both normal. A diagnostic lumbar puncture revealed malignant lymphocytes identical to those found in the testis and adrenal (Fig. 2).

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Discussion

Only 1% to 8% of all NHL involves the testis, but it is the most common testicular tumor found in men over the age of 60 years. It may cause anorexia, weight loss, weakness, fever, and sweats, with or without painless swelling of the testicle.² These tumors are usually of unfavorable histologic type, and they have recently been shown to be of predominantly B-cell origin.³ Half are localized or locally regional.⁴ They have the ability to progress rapidly in extranodal sites such as the other testicle, Waldeyer's ring, skin, and CNS.

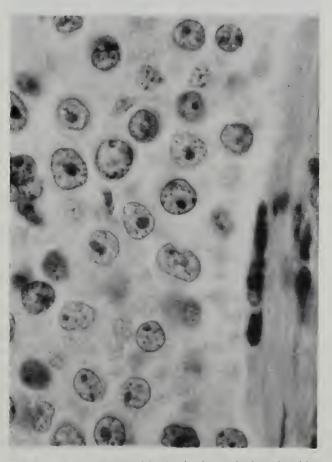


Figure 1. Section of the testicle showing it completely replaced by lymphoma cells (hematoxylin-eosin, ×1,000).

TESTICULAR LYMPHOMA/Lands

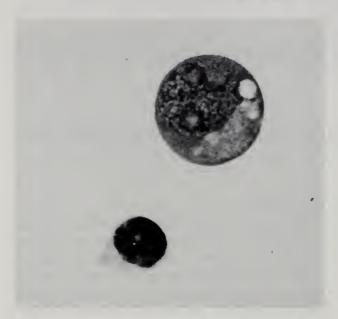


Figure 2. Spinal fluid cytology showing a malignant lymphoma cell near a normal lymphocyte (Wright-Giemsa stain, ×1,000).

The stage at diagnosis is the single most important predictor of survival. Patients with accurately staged IE disease have a 40% two-year survival rate if treated with orchiectomy only.⁵ Stage IE disease treated with radiation therapy alone has a mean time to progression of 12 months with a median survival of 39 months. When treated with a combination of surgery, involved field radiation to include the remaining testicle, and combination chemotherapy, a four-year survival of 93% has been reported.⁶

The treatment for advanced testicular NHL with chemotherapy has produced few long-term survivors,

though the drugs administered and the intensity of therapy has been variable.2 While advanced NHL in a nodal distribution is potentially curable with chemotherapy, the impact of more recent combination chemotherapy regimens has not been measured in the patient with testicular NHL.⁷

Unfavorable histology NHL in the testicle is known to be a risk factor for CNS relapse, but the simultaneous occurrence of testicular lymphoma and CNS disease is unusual.⁸ This presentation requires the simultaneous management of the systemic and CNS disease. In a patient with leptomeningeal NHL, treatment with intrathecal chemotherapy and wholebrain radiation may have an additive beneficial effect. In the patient with simultaneous systemic disease, benefit from CNS radiation and intrathecal chemotherapy is derived only if the systemic disease can be controlled.9

This unusual case of simultaneous testicular and CNS NHL emphasizes the importance of a thorough physical examination, including examination of the testes, in men over 60 years old with NHL.

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Portal and Superior Mesenteric Venous Thrombosis Following Splenectomy

ANNA HICKMAN, M.D.; STEPHEN K. WILSON, M.D.; MICHAEL STEIN, M.D.; and JAMES LEWIS, M.D.

Introduction

Portal and superior mesenteric vein thrombosis has rarely been reported as a complication of splenectomy following trauma. The diagnosis can be difficult, with a presentation ranging from almost complete absence of symptoms to that of an acute abdomen. Ultrasonography and CT scanning are of value in demonstrating thrombosis, allowing early diagnosis and treatment to avert extensive bowel infarction.¹

Case Report

A 43-year-old white woman driving without restraints collided head-on with a stone wall. She was responsive at the scene, complaining of left chest pain; her blood pressure was 110/60 mm Hg. Initial hospital evaluation revealed stable vital signs within normal range. There was tenderness over the left chest anteriorly and the left upper abdominal quadrant without rebound or rigidity. Hematocrit was 39.8%. CT scan of the abdomen with vascular enhancement showed massive injury to the spleen with perisplenic hemorrhage. When exploratory laparotomy revealed extensive fracture of the spleen that was not conducive to splenorrhaphy, a splenectomy was performed; no other intra-abdominal injuries were noted. Two units of packed red blood cells were given intraoperatively. The patient's postoperative course was uneventful, with a platelet count of 792,000/cu mm prior to discharge on postoperative day ten.

The patient returned to the emergency room four days after discharge with nausea, vomiting, cramping left lower quadrant pain, and a history of grossly bloody bowel movements. Her abdomen was not distended, but was tender in the left lower quadrant with hypoactive bowel sounds and mild rebound tenderness. She was afebrile. Platelet count at that time was 629,000/cu mm, and serum amylase was normal. CT scan showed peripancreatic edema and swelling of the pancreatic head. Ascites was present, and there was a suggestion of portal and superior mesenteric venous occlusion (Fig. 1), which was confirmed by abdominal Doppler examination (Fig. 2). Anticoagulation with intravenous heparin was initiated, as was total parenteral nutrition to place the bowel at rest and decrease its vascular requirements. When after seven days of intravenous heparin a repeat abdominal Doppler study showed flow through the portal vein, heparin was discontinued.

On hospital day ten, abdominal exploration was necessitated by the development of acute acalculous cholecystitis occurring during heparin therapy. Ascites was found, but the

mesenteric circulation appeared normal and there was no evidence of bowel necrosis. Cholecystectomy was performed.

Eight days after cholecystectomy, she developed right calf tenderness; Doppler flow studies showed extrinsic compression of the right iliac vein, possibly by pelvic abscess. At exploratory laparotomy a pelvic abscess was drained and eight



Figure 1. CT scan showing peripancreatic edema. The marker demonstrates the portal vein, with the superior mesenteric vein containing thrombus lying posteriorly.

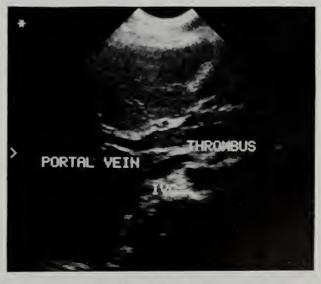


Figure 2. Abdominal ultrasound demonstrates thrombus in the portal vein

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inches of necrotic, perforated mid-jejunum were resected. Her subsequent postoperative convalescence was uncomplicated, and she was discharged home in stable condition after one month's hospitalization. One year has passed without sequelae.

Discussion

Transient postsplenectomy thrombocytosis occurring after one week to six weeks is not a common cause of thromboembolism. Thrombotic complications of extremity and visceral venous thromboses are rare, with antiplatelet therapy usually reserved for platelet counts exceeding 1,000,000/µl.2 Splenectomy for trauma carries no greater risk of thromboembolism than any other abdominal operation, even in the presence of subsequent thrombocytosis.3 A factor that may, however, promote development of portal and superior mesenteric venous thrombosis is extension of thrombus from the splenic vein remnant if it is not divided near its junction with the superior mesenteric vein.4 It is, however, recognized that in the trauma patient this is a method not commonly used and not recommended by many authors.

Diagnosis of visceral thrombosis was made in our patient by two accurate methods, ultrasonography and CT, both demonstrating thrombus, venous dilation, and loss of surrounding landmarks. Subramanyan et al5 detected thrombus in 94% of patients with portal vein thrombosis by ultrasound and 76% by CT scan.

The spectrum of acceptable treatment for portal and superior mesenteric vein thrombosis includes intravenous anticoagulation, percutaneous transhepatic catheter with enzymatic thrombolysis, and surgical thrombectomy with resection of necrotic bowel. If anticoagulation is used, it should be continued until resolution of the thrombus has been shown by followup ultrasound study or CT scan, with short-term oral anticoagulation continued for six months to one year.6 Thrombolysis via catheter infusion of urokinase uses an initial dose of 3,500 IU/kg/hr for two hours, followed by 1,500 IU/kg/hr for eight hours. Surgical thrombectomy should be considered in the presence of progressive thrombosis, with development of symptoms and signs of mesenteric vascular compromise, including severe abdominal pain, leukocytosis, and metabolic acidosis.

In conclusion, portal and superior mesenteric venous thrombosis following splenectomy for trauma, although uncommon, can be diagnosed and treated by a variety of modalities with favorable outcome.

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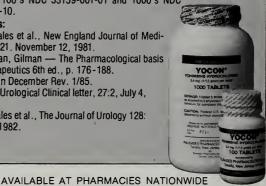
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Upper Extremity Vaso-Occlusive Disease in a Patient With Giant Cell Arteritis

Case Report

A 59-year-old woman was admitted to Vanderbilt Hospital with the chief complaint of prolonged fever and weight loss. The patient was very healthy and active until eight weeks before admission when she developed severe occipital headaches, fever, and pain in the jaw on mastication. Antibiotics were prescribed for treatment of presumed sinusitis, with some improvement in her symptoms. She subsequently developed almost daily fever as high as 102°F, night sweats, and malaise. Because of extreme fatigue, she retired from her job of 31 years as a telephone operator. Her hips were stiff and painful, particularly in the morning on arising. She noted a 20-kg weight loss in the preceding two months; she denied visual changes.

Her past medical history was unremarkable. Her only medication on admission was aspirin, which she took every morning for her hip stiffness. She did not smoke cigarettes. There was no family history of coronary artery disease,

diabetes, or hypertension.

On physical examination she was a thin, pleasant woman in no distress. Temperature was 103°F, and blood pressure 100/60 mm Hg in the right arm. She had occipital scalp tenderness. Temporal artery pulses were normal and without tenderness. The remainder of the physical examination was normal. PCV was 33%, and Westergren erythrocyte sedimentation rate (ESR) was 114 mm in the first hour.

Extensive investigation revealed no infection or malignancy. Giant cell arteritis (GCA) was suspected. One day before a planned temporal artery biopsy, she developed right arm paresthesias and pain. Brachial, radial, and ulnar pulses were absent. An arteriogram revealed total occlusion of the axillary artery with distal reconstitution. Thrombectomy was performed and heparin therapy initiated. Temporal artery biopsy was rescheduled for the next day, but when heparin was discontinued in preparation for the procedure, she again developed right arm vaso-occlusive symptoms; during surgery, fresh thrombus was found in the axillary artery. A markedly thickened and inflamed segment of the axillary artery was resected and saphenous vein grafting was performed. Microscopic examination of the vessel revealed typical features of GCA. Steroid therapy was initiated, and the remainder of her hospital course was uneventful. At a six-month follow-up visit, she had no further ischemic symptoms. The ESR was 20 mm/hr.

Discussion

GCA is a systemic vasculitis that occurs in patients over 50 years of age. The most common clinical features relate to involvement of the temporal arteries, and associated polymyalgia rheumatica, but the disease may be widespread, and virtually any medium-sized or large

artery can be involved, expanding the clinical spectrum.

Inflammatory involvement of upper extremity vessels in GCA was first described by Jennings in 1938.² GCA has since been well documented in several autopsy studies, in which a high incidence of patients have involvement of the proximal arteries of the arms. The clinical significance of these lesions varies considerably.^{3,4} Upper extremity ischemic symptoms may be an accompanying feature of the disease, or they may develop during tapering of steroids for seemingly quiescent disease. The involvement may also be asymptomatic. The most common vascular symptoms are intermittent claudication, paresthesias, and Raynaud's phenomenon. Bruits over the larger arteries, diminished or absent pulses, asymmetry of blood pressure, and gangrene of the upper extremities may be present. If untreated, thrombosis may occur at sites of active inflammation and cause acute limb ischemia.3,5

Consideration of other diagnoses should include atherosclerosis and Takayasu's arteritis. Atherosclerosis occurs frequently in the elderly population susceptible to GCA. Careful questioning about risk factors for atherosclerosis is essential, though isolated atherosclerotic disease of the upper extremities is uncommon. Most patients will have concomitant symptoms of leg claudication or angina.⁶ Takayasu's arteritis affects predominantly younger individuals, and has an ethnic predisposition.⁵

Angiography may be important in distinguishing vasculitic from atherosclerotic upper extremity disease. Angiographic features most suggestive of arteritis include long segments of smooth arterial stenoses alternating with areas of normal-sized or increased-caliber vessels, and smooth-tapered occlusions of affected large arteries. Irregular plaques and ulcerations suggest atherosclerosis.³ Calcification may be seen with either entity.⁷ Anatomically, GCA involves predominantly the subclavian, axillary, and brachial arteries. Angiography has also been used to confirm the reversibility of the stenotic lesions in GCA after treatment with steroids.⁸ This patient illustrates the limitations of angiography, as her study did not suggest vasculitis.

If GCA is suspected, temporal artery biopsy is recommended for definitive diagnosis, as it is the most accessible medium-sized vessel. A positive biopsy reveals a granulomatous inflammation with giant cells

Presented by Kathleen Maletic Neuzil, M.D., Hugh J. Morgan chief medical resident, Vanderbilt University Hospital, Nashville.

Presented at the annual meeting of the American College of Physicians, New Orleans, April 1991.

at the intima-media junction in 50% of patients, with a less specific panarteritis in the other 50%. The involvement is characteristically focal and segmental, so that a negative biopsy does not rule out GCA.9 The histologic lesions to not subside before the second week of therapy, and biopsy may therefore still be diagnostic in a patient treated with steroids.8

Inflammation of vessels of the upper extremity responds well to steroids. Surgical reconstruction should be avoided during the acute phase of arteritis, as there are reports of early recurrence of the thrombus. If revascularization is necessary for symptomatic relief, it should be performed after institution of corticosteroids.6 One needs to follow the patient closely for signs of upper extremity ischemia as the steroid dosage is reduced.

This case dramatically illustrates an unusual consequence of untreated GCA. It emphasizes the importance of initiating steroid therapy when the diagnosis is suspected. It also highlights the need to consider inflammatory arteritis in any patient without significant risk factors for atherosclerotic disease who has upper extremity ischemic symptoms.

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Ventricular Septal Rupture Following Myocardial Infarction

Case Report

A 71-year-old woman was admitted to Vanderbilt Hospital for evaluation of a cardiac murmur and congestive heart failure. Her past medical history is significant for type 2 diabetes controlled by diet, and mild hypertension. She presented herself to an outside hospital approximately one year before her Vanderbilt admission with an acute anterior myocardial infarction (MI). On treatment with tissue plasminogen activator, reperfusion of the myocardium was thought to have occurred, and she recovered from the MI without complications. Two days after discharge from the hospital, she presented herself with marked dyspnea on exertion, orthopnea, and ankle edema, thought to be due to congestive heart failure; a loud cardiac murmur was noted at that time. Captopril was added to the medication she was receiving, with dramatic improvement in her symptoms, and she was discharged.

She did reasonably well during the following year and was lost to medical follow-up. She was seen approximately a year later complaining of chronic dyspnea on exertion, orthopnea, and ankle edema. A loud cardiac murmur was heard again, and she was referred to Vanderbilt Hospital for further evaluation.

On physical examination, she was a thin elderly woman in no distress. Blood pressure was 140/96 mm Hg, and pulse was 84/min and regular. There was cyanosis of the distal extremities and mild perioral cyanosis. Her chest was clear to

auscultation. Cardiac examination revealed a regular rhythm, and the apical impulse was felt at the fifth left intercostal space at the midclavicular line. There was a normal first heart sound and a physiologically split second heart sound with mild accentuation of the pulmonary component. A grade 2/6 holosystolic murmur at the right lower sternal border increased with inspiration, and there was also a loud, grade 4/6 harsh holosystolic murmur, heard throughout the precordium but loudest at the left lower sternal border, with a palpable thrill. No diastolic murmurs were noted, and there were no third or fourth heart sounds. There was marked jugular venous distention with prominent V waves. The carotid upstrokes were normal and there were no carotid bruits. The liver was enlarged and pulsatile and measured 15 cm by percussion; there were no palpable abdominal masses or tenderness. No peripheral edema or clubbing was noted.

Chest x-ray revealed cardiomegaly and increased pulmonary vasculature. ECG revealed normal sinus rhythm, a left atrial abnormality, left anterior hemiblock, and evidence of an old anterior MI. Echocardiogram showed normal left ventricular size with thinning of the wall and akinesis in the anterior septum and anterolateral wall, and the right ventricle was enlarged with mildly reduced contractile function. The left ventricular ejection fraction was approximately 50%. There was tricuspid valve prolapse with moderate to severe tricuspid regurgitation, and there was also a shunt across the ventricular septum near the apex. The findings were consistent with ventricular septal rupture.

Cardiac catheterization verified the ventricular septal defect

Presented by John R. Lane, M.D., medical resident, Vanderbilt University Hospital, Nashville.

(VSD). There was moderately severe pulmonary hypertension with a right ventricular pressure of 95/5 mm Hg that fell to 65/0 mm Hg with nitroprusside. There was a step-up in oxygen saturation as follows: SVC 46%, RA 56%, RV 61%, RV outflow 71%, PA 81%.

The VSD, measuring 8 mm, was repaired surgically with a Dacron patch. A midseptal MI scar was noted. The patient did well postoperatively, and was discharged on hospital day eight.

Discussion

Rupture of the ventricular septum following MI occurs in approximately 1% to 2% of cases,1 and within one week of the infarction,1 which is most often transmural.² It is more likely to occur with the patient's first transmural MI owing to a lack of collateral arterial flow to the myocardium. The location for such a VSD is typically near the junction of the septum and the anterior or posterior wall.

Diagnosis is suggested with the appearance of a new post-MI murmur which may easily be mistaken for mitral regurgitation. A thrill may be present, such as occurred in 48% of patients in the series studied by Radford et al.³ Septal rupture may be demonstrated by two-dimensional echocardiography either via direct visualization or via saline contrast studies. Echocardiography commonly underestimates and may fail to detect the VSD. Perforations may occur in regions of the septum that are not well visualized by echocardiography, and saline contrast studies require a good image with low background noise.4

Right ventricular function is probably the most important determinant of subsequent progression to heart failure, shock, and death.3,5 Radford et al3 found that neither right atrial pressure, pulmonary capillary wedge pressure, magnitude of shunting, left ventricular ejection fraction, underlying coronary artery disease, nor whether or not coronary artery bypass grafting was done at the time of surgical VSD repair were significantly correlated with survival.

Nonoperative management is associated with a high mortality. Sanders et al⁶ found that patients who were managed medically had a 24% mortality in the first 24 hours, 65% within two weeks, 87% within two months, and 93% within one year. Cardiogenic shock preoperatively is associated with high mortality, whereas severe congestive heart failure without shock has a much lower postoperative mortality.

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The Improving Dental Health of School Children

JAMES A. GILLCRIST, D.D.S., M.P.H.; DURWARD R. COLLIER, D.D.S., M.P.H.; and GEORGE T. WADE, M.A.

According to an oral health survey conducted in 1988 by the Division of Oral Health Services of the Tennessee Department of Health and Environment, over half of all Tennessee school children ages 5 through 17 have never had a cavity in their permanent teeth. The findings of the survey were similar to those reported in a nationwide study conducted by the National Institute of Dental Research (NIDR) in 1987.

Cross-sectional studies conducted since World War II at the national, state, and local levels have been remarkably consistent and provide irrefutable evidence that there has been a steady decline in dental caries prevalence among school-age children in this country.

In the 1988 state survey, dental personnel trained in standardized survey techniques traveled to schools throughout Tennessee to collect data. Licensed dentists conducted oral examinations and registered dental hygienists recorded the data on specially designed optical scanning forms. Standard epidemiologic indices were used to measure the prevalence of dental caries in the permanent and primary teeth. Examinations were completed for 2,588 school children who were randomly chosen to represent 927,000 children enrolled in public and private schools. The results showed that 55% of all school children ages 5 through 17 had no decay in their permanent teeth and that the average child had fewer than three decayed, missing, or filled permanent tooth surfaces.

Over 74% of the reported cavities had been filled, suggesting that a high level of restorative dental care had been rendered. The pattern of attack demonstrated little disease activity between the teeth, most of the cavities being on the chewing surfaces, which benefit least from fluorides. This emphasized the need for dental sealants (plastic resins), which have been shown to be highly effective in preventing pit and fissure decay when properly applied to the chewing surfaces of newly erupted teeth.² It was estimated that only 10% of children ages 6 through 17 had dental sealants on their permanent teeth.

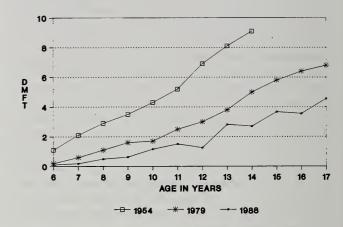


Figure 1. Comparison of caries prevalence scores from statewide surveys, Tennessee, 1954, 1979, 1988.

Comparisons of results of the 1988 survey with earlier state surveys suggest that school children had 33% less tooth decay in 1988 than they did in 1979,³ and about 75% less than in 1954⁴ (Fig. 1). Although the survey was not designed to determine the cause for the downward trend in tooth decay, it is believed to be due primarily to the widespread use of fluorides in community water supplies, toothpastes, dental office applications, and the food chain. The first community in Tennessee to raise the concentration of the natural trace element fluoride in its drinking water was Milan in 1951. Today about 93% of Tennesseans on public water systems consume water with optimal fluoride levels (unpublished), compared to only 61% nationally.⁵

While the selected findings reported here are very encouraging, one should not be lulled into believing that dental caries have been eradicated in this state or nationally. In fact, 45% of all children ages 5 through 17 in Tennessee still have cavities on one or more surfaces of their permanent teeth and 72% of teenagers ages 12 through 17 have tooth decay. Furthermore, data from recent studies conducted by the National Institute of Dental Research, the National Center for Health Statistics, 6.7 the Indian Health Service, and the University of North Carolina, indicate that while caries rates have declined among all children, certain high-risk

From the Tennessee Department of Health, Nashville. Dr. Gillcrist is director of Dental Health Services for the Metropolitan/Davidson County Health Department. Dr. Collier is director of the TDH Oral Health Services. Mr. Wade is with the TDH Division of Information Services.

groups, including minorities and children whose parents had less than a high school education, had more caries and more untreated caries than the general population.

Further reductions in dental caries and other oral diseases in Tennessee will depend upon a continued commitment to community-based oral health promotion and disease prevention programs that include children in high-risk groups. Fifty-six years of state dental public health involvement has already wrought significant returns in the form of measurable improvement in the oral health of all Tennesseans, but particularly among children. Primary prevention must be coupled with secondary preventive measures so that asymptomatic oral disease is detected early and treated promptly. Dental care must also be extended to those who can least afford it because they need it the most. It is essential that individuals become actively involved in improving their personal oral health through healthy lifestyles and a high level of personal oral hygiene. Finally, the public and private sectors of dentistry must continue to work in harmony to improve and protect the oral health of all

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Radiology Case of the Month

KELLY PARKS GUNTER, M.D. and STEPHEN L. GAMMILL, M.D.

Case Report

A 65-year-old man gave a four-day history of progressive pain and tenderness localized to the right lower quadrant, associated with fever, leukocytosis, and a right lower quadrant mass; rebound tenderness, nausea, and vomiting were absent. A water-soluble contrast enema showed numerous diverticula but no other abnormalities. This was later followed by CT examination of the abdomen and pelvis. After examining the CT image in Fig. 1, and considering the history, choose the best answer:

- (1) Appendicitis
- (2) Perforated carcinoma
- (3) Diverticulitis
- (4) Crohn's disease

Discussion

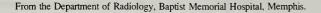
The axial CT image in Fig. 1 was obtained at the level of the cecum. This study demonstrated a focal thickening of the posterior cecal wall and adjacent inflammatory changes in the pericolic fat. The clinical history and findings were consistent with cecal diverticulitis. Antibiotic therapy for four days was followed by surgical exploration of the right lower quadrant of the abdomen. Pericolic inflammation established the diagnosis of right-sided diverticulitis.

In most patients with acute right lower quadrant pain and tenderness, a diagnosis of appendicitis can be established on clinical presentation alone, requiring few laboratory or radiologic studies, but further diagnostic evaluation may be indicated in patients with a previous appendectomy or in those whose pain has lasted more than 72 hours. Diverticulitis of the right colon should be a consideration in such patients.

Contrast enema has been the radiologic procedure most often used to confirm the diagnosis of diverticulitis. Since acute diverticulitis is primarily an extraluminal process, however, the contrast enema cannot assess the full extent of the pericolic pathology.

CT permits the direct visualization of the entire thickness of the bowel wall, adjacent soft tissues, and mesenteries. In addition, pericolic abscesses can be easily evaluated by CT. They are seen as collections of fluid, air, and/or fecal debris. These may be in locations such as the subphrenic area, psoas muscle, or flank. Other findings, such as intramural sinus tracts, colonic obstruction, and ureteral obstruction can be evaluated with CT. Diverticula can be identified projecting through the colonic wall in most cases.

In a review by Hulnick et al² of 43 cases of diverticulitis, contrast enema underestimated the severity of disease in approximately 40% compared to CT. CT more accurately defined the extent of the pericolic in-



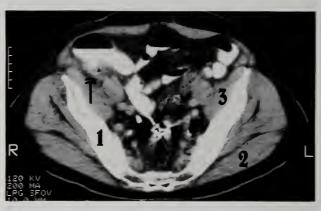


Figure 1. Note focal thickening of the posterior cecal wall and adjacent inflammatory changes in the pericolic fat (arrow). (1 = iliac bone, 2 = gluteus maximus muscle, 3 = iliacus muscle)

flammation process, differentiated simple inflammation from frank abscess, and demonstrated remote abscesses and urinary tract involvement that could not be identified with contrast enema. In their study, contrast enema examinations did not detect pericolic diverticulitis if it was not evident on CT. Contrast enema and CT were comparable in the demonstration of the presence of diverticula.

CT has several advantages over contrast enema. First, it better delineates the presence and extent of the pericolic inflammatory process. Second, it evaluates possible extension of disease far removed from the colon, including involvement of other organs. Finally, it is less invasive than contrast enema. In the opinion of many,³ CT is indicated in all patients with suspected diverticulitis, and should be the initial imaging procedure. After establishing the diagnosis, CT helps in the selection of patients needing surgical management or abscess drainage by drainage tube placement. Drainage catheters are frequently placed using CT guidance by radiologists in our department.

It is important to point out that CT findings are not pathognomonic.⁴ Therefore, if clinical symptoms subside on appropriate medical therapy, a contrast enema needs to be performed to exclude Crohn's disease or carcinoma with perforation.

FINAL DIAGNOSIS: Cecal diverticulitis.



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Same Procedure—Different Standards

J. KELLEY AVERY, M.D.

Case Report

A 55-year-old woman had been taking an anticoagulant for ten years following placement of a prosthetic mitral valve because of rheumatic fever in childhood. This patient had noted some intermittent bright bleeding at stool for at least six months. She had been examined by her primary care internist, who had found very dark fecal material on rectal examination strongly positive for blood by Guaiac testing. Physical examination did not reveal anything suggesting the origin of this bleeding. The internist referred her patient to a local gastroenterologist for further investigation.

The specialist repeated the physical examination, again with negative findings, but the PCV and hemoglobin had fallen from 38% and 13.5 gm/dl respectively to 30% and 11 gm/dl respectively in the two weeks since the primary care internist had checked them. With the history suggesting that the bleeding had probably originated in the large bowel, a full colonoscopy was scheduled. The preprocedure PTT was reported as 23 seconds (normal 12). The endoscopy was to be done in the

gastroenterologist's office at 8:00 AM.

Under intravenous sedation with a small dose of midazolam hydrochloride (Versed) and without an attendant, the specialist positioned the table for the examination by putting it in the head-down position. Before the procedure began, the patient slipped from the table, falling about three feet head first onto the floor and sustaining a 1.5-inch laceration of the scalp in the right occipital region. The patient was taken to the emergency room of a nearby hospital, where x-rays of the skull were negative; the laceration was repaired without incident. At this point, the gastroenterologist took his patient back to his office and finished the colonoscopy. No cause for the bleeding was found, and it was suspected that even though the PTT was within acceptable levels, the anticoagulant was the cause of the bleeding.

Following the procedure, the patient was admitted to the hospital for observation with the diagnosis of possible concussion. She remained stable through the next 24 hours and was discharged from the hospital to be followed as an outpatient. An H₂ blocker was prescribed, and the PTT was allowed to drift lower to a level of 1.5 times the control. No further bleed-

ing occurred during follow-up period.

Three weeks after the injury the patient complained to her internist of increasing headaches, and a CT scan of the head revealed a subdural hematoma. She was referred to a neurosurgeon who performed a craniotomy, removing the blood clot. The patient's recovery was uneventful except for residual headaches, which gradually improved.

About six months after the event a lawsuit was filed charging negligent performance of the procedure. The contention was res ipse loquitur, "the thing speaks for itself." A prompt settlement was negotiated.

Loss Prevention Comments

This case is presented to illustrate some very important facts regarding the world in which we care for our patients these days. This patient had her endoscopy done as an outpatient in order to save her some money. She was covered by insurance, but in her plan the outof-pocket expense for the hospital, the operating room, etc., would have been considerable. The specialist's office was properly equipped, and the physician was certainly competent. But in the performance of this procedure some vital shortcuts were taken.

Although the intravenous sedation with midazolam hydrochloride did not appear to cause trouble, doing this without backup by help that can closely monitor the patient's vital signs is not acceptable practice. Even under the most ideal circumstances, the ability of this drug to cause serious respiratory depression is well known.

There were no restraints on the table to prevent this kind of accident. Head-down positioning is required for performing this procedure, and it is reasonable to expect that protection of some kind would be employed.

The physician's office medical records were not available for three weeks after the procedure. There was no documentation of a pre-procedure evaluation, and no informed consent in the doctor's record. The absence of these fundamentals in the medical record indicated that preventing patient injury did not have a high priority in this physician's practice.

As more and more of the care we give is done in our offices or in an outpatient facility, it is absolutely essential that quality is not compromised. Our patients demand the same level of care as outpatients as they receive in the best of our hospitals. Keeping that in mind will be true loss prevention!

Dr. Avery is chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood, and associate director of Medical Affairs, St. Thomas Hospital, Nashville.

New Research Shows Health Care Concerns

ROBERT BOWERS, M.D., Chairman
TMA Communications and Public Service Committee

For the second year, TMA has commissioned a research study for its Community Awareness, Research, and Education (CARE) program to ascertain the opinions of patients in Tennessee. The research results were announced at this year's TMA Annual Meeting in Memphis.

According to the study, nearly two-thirds of Tennesseans would be willing to pay 1% more in taxes to provide health care to those who cannot afford it. Respondents also list the cost of health care to be the most important health issue for the second straight year.

Last year's survey revealed that Tennesseans were concerned about inadequate access to health care for lower income families and the elderly. This year, the statewide survey went one step further, gauging just how strongly patients feel about this issue. The willingness to support a tax—if they knew the exact amount of money they would be taxed and the specific use of the funds—demonstrated this intensity. (The TMA was not advocating a tax, merely attempting to determine the level of interest in this area.)

With a margin of error of plus or minus 6%, this survey is a valuable tool in the TMA's communications and patient care efforts. It helps us understand the issues that matter most to our patients and provides us facts to address these broad concerns. This translates to better care for our patients.

The random telephone survey of 300 Tennesseans over the age of 18 who are responsible for health care decisions in their household was conducted statewide in February by Nashville-based NCG Research. Physician households and physician employees were excluded.

Some other important findings from the survey and their comparisons to last year's survey are:

- Rising Health Care Costs and Liability Coverage. Most Tennesseans continue to agree that health care costs are increasing at least as fast as or faster than they were five years ago. Seventy-three percent in 1991 think that malpractice insurance is one of the main reasons for the increase, compared to 67% in 1990.
- Personal Physician. In 1991, 77% of those surveyed said they have a personal physician they see regularly, a small drop from 1990's 81%.
- Quality of Medical Care in Tennessee. About 40% of the Tennesseans questioned say the quality of health care has improved over the last five years, while 16% feel it has declined. Twenty-five percent responded it has stayed the same, and 20% didn't know or refused to

answer. In 1990, 47% said the quality has improved, while the number of people who had no opinion was 12%.

The most popular reason for believing health care has improved is "improved technology." "Better customer service from doctors" and "better educated doctors" were also mentioned.

- Government's Role in Health Care. When asked whether the government should control health care costs, 35% said no in 1991, while 42% said yes in 1990.
- *AIDS*. Is the AIDS epidemic the most important health problem in Tennessee? Fifty-two percent of the respondents said it was in the 1991 survey, compared to 47% in 1990's research.
- Access to Health Care. Tennesseans still question whether lower income families and the elderly have adequate access to the health care they need. Forty-nine percent of those questioned said lower income families had inadequate access in 1991 compared to 48% in 1990. In 1991, 57% said the elderly have inadequate access and in 1990, 53% said so.

In addition to the question about taxes to help pay for health care for the poor, two other new questions were added to the survey.

- Living Wills. Sixty-seven percent of Tennesseans are familiar with the term "living will," but only 16% of them currently have a living will or live with someone who does. Awareness was highest among women ages 35 to 64 with higher income households. Forty-six percent of those in households without a living will say they plan to have one in the next five years, especially those with higher incomes.
- Organ Donation. One-half of the adults who make health care decisions would be willing to donate their organs. The researchers said that the absence of a consensus could indicate that Tennesseans still lack a real understanding of the organ donation process.

The survey gives us a more precise focus for our CARE efforts in 1991. The results demonstrate that we are already addressing many of our patients' needs.

Some of the results surprised us, while some confirmed our suspicions. The information offers a unique opportunity to discover what our patients think about a number of health care issues. If you are interested in receiving a copy of the survey's Executive Summary, please call TMA at (615) 385-2100. Or read about the study in your copy of *TMA TODAY*, which was included in the June issue of the *TMA Chart*.

"Can I see another's woe

And not be in sorrow too?

Can I see another's grief

And not seek

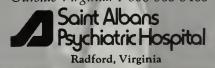
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Contract Law: Some Basic Lessons

MARC E. OVERLOCK TMA Staff Attorney

Popeye! I will gladly pay you on Tuesday for a hamburger today!

—Wimpy

A person who creates a reasonable expectation that a bargain promise will be fulfilled will be liable to answer for that expectation if it is not fulfilled without excuse.

-Professor Langevoort1

If memory serves, Popeye and Wimpy never actually consummated their hamburger deal. Or, at least, Popeye was never paid on Tuesday for the previous week's repast. Deals often go sour after only one party has fully performed his obligations. This continuing problem has created an ever-burgeoning evolution in the law of contracts. The latest facet to be cut into this legal diamond occurred with the Tennessee Supreme Court's decision in Lewisburg Community Hospital, Inc. v Alfredson.2 The full implications of this watershed case are discussed elsewhere in this issue of the Journal by attorney B. Allen Bradford. Hospital bylaws have now risen to the level of a contractual arrangement between physicians and the hospital. But what precisely is a contract? What are its elements? When a physician treats a patient, is that simply a contract between a professional and his client? Or is it a contract with a third party payor? What happens if a patient is divorced with a decree signed by a judge clearly stating that the ex-husband is responsible for all medical bills? Can the physician bill the patient anyway?

Basic contract law can answer all of these questions. Like the process involved with a good medical diagnosis, one must break contract issues down into their component parts. Lewisburg Hospital, according to the Supreme Court, had an obligation to provide a fair hearing to Dr. Alfredson prior to concluding that his staff privileges should be terminated. The Court remanded his case back to the Lewisburg Circuit Court for a determination of the damages due him for the contract's breach: the failure to provide a fair hearing. This fair hearing was but one element of the hospital's agreement with Dr. Alfredson. Thus, the case stands almost as much for the proposition that a hospital's bylaws form a contractual relationship with the medical staff, as it does for the way in which ambiguous documents can be defined by a court to one party's detriment. Contracts

create expectations on the part of people that obligations will be fulfilled. When an obligation is left unfulfilled, the contract is said to have been breached. In simplified form, *Black's Law Dictionary* states that a contract's essential elements include "competent parties, subject matter, a legal consideration, mutuality of agreement, and mutuality of obligation." These phrases seem hollow at best until they are better defined.

In the professional arena, when physicians, lawyers, and tax accountants breach contracts with their clients or patients, malpractice occurs. Creative plaintiffs in Tennessee have often tried to sue these professionals under a breach of contract theory in order to revive a malpractice case that has lapsed because a statute of limitations has run.⁴ The limitation on breach of contract suits is six years compared to one year for torts such as malpractice.⁵ Tennessee courts soundly reject this theory each time it is raised,⁶ but this limitation can be extended when a lawyer, physician, or other professional fraudulently conceals the tortious injury.⁷ In any event, with this broad introduction in mind, basic contract elements can now be examined one at a time.

The Parties

This may seem almost too basic to address, but deciding who the parties to a contract are is often critical. In Dr. Alfredson's case, both he and Lewisburg Community Hospital, Inc. were the parties. The law creates a fiction in assuming (as in this case) that a corporation is a person.8 As a person, a corporation can sue and be sued, lend money, elect its directors, and make contracts. By contrast, for the medical office it is important to distinguish the parties to the contract for medical treatment. The physician provides a diagnosis and related services and the patient pays for those services. It may sound obvious to the casual observer, but the only parties to the contract are the patient and the physician. Thus, at the end of the visit when the patient asserts that there is a court order stating that her ex-husband is responsible for the bill, the law is settled. The ex-husband is responsible to her for the bill, not to the physician. The only way a divorce decree could ever obligate a physician to seek payment from an ex-husband is when the physician was a party to the lawsuit that resulted in the divorce. Of course, the physician can

agree to bill the ex-husband, but that is a professional courtesy, and does not alter the patient's original obligation to pay for the treatment.

Third party payors (i.e., health insurance companies or Medicare) present a far different situation. Physicians, by assignment, step into the shoes of, or are "subrogated" to, their patients to seek payment for services from the insurer. In the case of Medicare, however, physicians who accept assignment enter into a contract with the Tennessee carrier that is completely separate from the patient's treatment contract. This contract creates obligations on the physician such as filing claims under the correct coding procedures. Workers' Compensation presents a more complicated set of third party payor contractual obligations beyond the mere treatment arrangement between doctor and patient. The physician who accepts workers' compensation cases confronts a whole body of statutory law by treating such patients.9 Additionally, it can be argued that the parties to such a contract include the injured employee, the employer, and the insurance carrier, even though the law states that "the employer shall pay for the services of the physician making the examination at the instance of the employer."10 Further complicating this picture is the possibility that an employer might refuse to provide medical care. In that event, the following statutory admonition applies, which states that "all cases of dispute as to the value of [a physician's] services shall be determined by [a court] having jurisdiction of the matter of compensation to the employee."11 In any case, the contract obligation to treat still flows from the physician to the patient.

The Offer

Once the parties to the contracting process are clearly defined, we can move to the next step: the offer. An offer can be as simple as it sounds. A gas station advertises high test, unleaded fuel at a certain price. The offer arises from both the promised price and the communication of the promise (the sign). Any conduct by one party from which someone else can reasonably infer a promise in return for a requested act or promise amounts to an offer. 12 Auctions provide prime examples of offers. An item such as a Van Gogh painting is displayed by the Sotheby's auctioneer with a statement that the bidding will begin at \$4.5 million. That statement is an offer. Someone may wink, flinch, or sneeze to indicate tentative acceptance of the price, or bid. A contract is formed if the bid is not withdrawn before the auctioneer, after howling "going once, going twice," yells "sold."

In another context, an option contract is an offer that remains open for a certain period of time. It confers on the "optionee" the right to purchase real estate (for example) within the stipulated time frame, subject only to the option's other terms.¹³ Another example of such an offer includes professional sports contracts in which a coveted athlete may be required to stay with a team an

extra year if the owner exercises that option right. Finally, professionals "hang out a shingle" as part of the offer process. Thus, when the client or patient makes an appointment the contracting process begins. This concept brings us to the third element of contracts.

The Acceptance

Wimpy often ended up with a hamburger at the end of a Popeye cartoon. Does that mean Popeye *accepted* Wimpy's delayed payment offer? We were never told. What is acceptance?

Following the gas station analogy, the customer accepts the fuel offer as soon as the pump begins delivering fuel to the car. The customer could attempt to negotiate a better price before pumping the fuel. Or, before the pump was turned on, the attendant could inform the customer that the price had been raised. (Thus, a new offer.) Acceptance, to some extent, is a state of mind, and can be expressed orally, in writing, "or merely be evidenced by [the] circumstances."14 By contrast, one's silence of inaction following receipt of an offer should not be construed as acceptance.15 The concepts of offer and acceptance are always ripe for litigation when parties fail to communicate fully. The simplest example occurs when a homeowner asks for a painter's bid and returns from the office to find a freshly painted home. The homeowner believed he was merely starting the negotiation process. Such "contracts" are virtually unenforceable since there never was an offer, let alone an acceptance; rather, there merely was an invitation to negotiate. This problem introduces the next element in a contract.

Mutual Assent: A Meeting of the Minds

The homeowner and painter mentioned above never had a meeting of the minds. Popeye and Wimpy did, although it is doubtful that Popeye was ever reimbursed for his charity. Communication, clear and concise, is the key to success at this stage. The keys are to ask what has been offered, and what was accepted. If the two parties' communications do not match, then there is no contract. This is the "mirror image" rule. Car sales present a classic mirror image problem. Generally, the standard in the industry is sales puffery and showmanship, which is part of the reason some people dread the negotiations. Indeed, in certain instances, it may take a certain amount of aggressiveness on the customer's part to assure that the agreed upon price is actually reflected in the final sales contract to be signed in the business office. Bait and switch tactics have long been outlawed by the Tennessee Consumer Protection Act. 16 A case in point will be illustrative.

In July 1986, Ms. Marion Paty walked into the showroom of Herb Adcox Chevrolet in Chattanooga looking to buy a brand new Chevrolet Camaro Z-28. Ms. Paty was pleased with and accepted the negotiated offer of a \$16,357 purchase price. A few weeks after she drove the car off the lot, she discovered that the car

had been previously damaged, really had 3,200 miles on it, and had been used as a demonstrator. The dealer offered to exchange it for another demonstrator. She refused this second offer twice and then sued the dealer under the Consumer Protection Act. Her complaint contained the following allegation, which describes, in symbolic terms, the parties' failure to arrive at a meeting of the minds:

Plaintiff further alleges that by intentionally concealing the fact that the automobile had been wrecked and repaired and concealing the list price of the automobile, defendant, Adcox-Kirby, is guilty of intentional misrepresentation and fraud which were material in inducing the plaintiff to purchase the automobile in question.¹⁷

The Court agreed that Ms. Paty had been intentionally defrauded and awarded her triple damages. In so holding, the Court examined the competence of the consumer, the nature of the deception and coercion "practiced upon the consumer," the customer's good faith, and her damages. 18 Ms. Paty also received attorneys' fees for her troubles. The main lesson from this case is that there can never be mutual assent between contracting parties when one or the other of them is hiding something. In the case of Dr. Afredson, the Supreme Court, in effect, stated that not only was there a meeting of the minds, but both parties had contracted for fair hearing rights. Other plaintiffs have not been so fortunate in getting similar relief. Even when there is mutual assent, however, through a mutual mistake of fact in which "each party was assenting to a different contract"19 courts will invalidate the agreement.20 This brings us to the final basic element of a valid contract.

Consideration

For Wimpy, consideration was the hamburger—now, not next week when he could pay for it. For a patient, it is the medical treatment and the personal visit from the physician. Legally, consideration "may be either a benefit to the promisor or a detriment to or obligation upon the promisee."21 Without consideration, a legally enforceable contract cannot be formed.²² Ironically, although there must be some consideration to form a valid contract, the adequacy of the payment need not be equal²³ to the consideration provided by the other party, but only "valuable."24 It has been said that a peppercorn was enough consideration to validate a contract.

The real key to this element is that it exists as part of the deal or arrangement. Thus, the divorced patient's argument that her ex-husband is obligated to pay for treatment must fail because there is no consideration. The ex-spouse received no treatment and never promised the physician that he would pay for it. He promised the court he would pay, or, the court decided to force him to cover the expenses, as part of the alimony. Other examples will help explain this element.

One of the main benefits a participating physician should get from a managed care contract is the ability to attract new patients from other physicians. In other

words, the participating physician should see an increase in his patient business. The physician agrees to lower his fee for service in exchange for increased patient volume. Thus, such contracts should provide some guarantee, or at least warrant, that there will in fact be an increase in patient volume. A second type of consideration in managed care contracts is the promise of prompt payment. The agreement should have clear and definite clauses ensuring promptness, as long as the physician follows the coverage verification rules.

Conclusion

Once a physician has a basic understanding of these contract elements, negotiating with entities such as hospitals for staff privileges should become more efficient. During the redrafting of hospital bylaws, the medical staff would be well advised to retain independent counsel to assist in the preparation. A hospital's attorney will, as Dr. Alfredson's case makes clear, represent the interests of the corporation, not the medical

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- 1. Professor Donald C. Langevoort's final lesson for his 1984 contract law class at Vanderbilt University's School of Law
 - 2. 16 TAM 10-1 (Sup Ct, March 4, 1991)
 - 3. Black's Law Dictionary 292 (5th ed, 1979).
 - 4. TCA §28-3-104 (Attorney Malpractice); TCA §29-26-116 (Medical Malpractice).
 - 5. TCA §28-3-109.
- 6. Jones v Morristown-Hamblen Hosp Ass'n, 595 SW2d 816 (Tenn App 1979); Harvest Corp v Ernst & Whinney, 610 SW2d 727 (Tenn App 1980); Nobles v Earhart, 769 SW2d 868 (Tenn App 1988); but see Hillhouse v McDowell, 219 Tenn 362, 410 SW2d 162 (1966).
- 7. Banton v Marks, 623 SW2d 113 (Tenn App 1981); Duncan v Leeds, 742 F2d 989 (6th Cir 1984).
 - 8. TCA §48-13-102.
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 - 13. Pinney v Tarpley, 686 SW2d 574 (Tenn App 1984).
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 - 15. Dorton v Collins & Aikman Corp., 453 F2d 1161 (6th Cir 1972).
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 - 19. 7 Tenn Juris, Contracts, §24.
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Clinical Privileges and Joint Venture Investments: Two Breaks for Physicians

B. ALLEN BRADFORD

During a period in which government agencies seem bent on making health care providers' lives difficult, two otherwise disparate court decisions provide physicians with good news. On March 4, 1991, the Tennessee Supreme Court ruled that a hospital breached its contractual relationship with a staff physician by reducing the physician's clinical privileges without a hearing. On March 1, 1991, in a case arising from the opposite side of the country, a ruling by a federal administrative law judge has, at least temporarily, slowed the federal government's attack on physician investment in health care joint ventures.

Clinical Privileges as Contract

On Oct. 3, 1985, Lewisburg Community Hospital (Hospital) in Lewisburg, Tenn., told Dr. David Alfredson that his exclusive radiology contract would be terminated without cause after a 90-day contractual notice period. The following Jan. 1, the Hospital administrator told Dr. Alfredson to be "out by midnight" and that he no longer had access to Hospital equipment and support personnel. The administrator also told Dr. Alfredson that he remained an active member of the Hospital's medical staff. At no time did the Hospital or its medical staff initiate a hearing to review this action, although the Hospital's medical staff bylaws set forth a fair hearing procedure. In May 1986, Dr. Alfredson sued the Hospital in Marshall County Circuit Court for, among other things, breach of contract based on the Hospital's failure to follow the fair hearing procedure when it terminated his clinical privileges.

Although the local circuit court ruled for the Hospital, it was reversed by the Tennessee Court of Appeals on this issue. The Hospital then appealed to the Tennessee Supreme Court.

Although the Supreme Court had never addressed this issue before, it held in *Lewisburg Community Hosp v Alfredson*¹ that the medical staff bylaws were a part of the contract between the Hospital and Dr. Alfredson. The significance of the decision is underscored by the fact that courts of few other states have made similar rulings.² Also the American Medical Association and the American College of Radiologists filed a joint "friend of the court" brief on behalf of Dr. Alfredson.

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The Court began by repudiating the Hospital's contention that a private hospital's governing body may exclude physicians for any cause it deems sufficient. In doing so, it limited the effect of a prior Supreme Court opinion which seemed to have supported the Hospital's view.³ The Court also pointed out that the Hospital could have negotiated contract terms to permit automatic termination of clinical privileges, but had not done so.

The Court then ruled against the Hospital's argument that only the medical staff, not the Hospital itself, is bound by the bylaws. The Court pointed out that state law requires all hospitals to adopt fair hearing procedures and abide by them. Such procedures, said the Court, are meaningless if the Hospital is not bound by them. The Court implied that the procedures are binding whether or not they are contained in hospital governing body documents or medical staff bylaws. Most importantly, the Court held for the first time that "a member of the Hospital's active medical staff [had] a contractual right to insist that the Hospital follow its bylaws."

The Court then dispensed with the Hospital's contention that "staff membership" and "clinical privileges" are two different things. The Hospital argued that, because its radiology contract with Dr. Alfredson required it only to maintain his staff privileges following termination, and it had done so, it had fulfilled its obligations. It added that, at any rate, his clinical privileges did not include access to equipment and other services. Either position dictated that no hearing was required because the doctor's actual *rights* of access—his real privileges—were not altered.

The Court ruled that clinical privileges are part and parcel of staff membership, and, in effect, one cannot be altered without affecting the other. The force of this ruling seems to be that, in this case at least, staff membership had no meaning without clinical privileges. The Court then proceeded to determine whether the doctor's clinical privileges had, in fact, been reduced.

In an unusual move, the Court decided that the record already contained enough information for it to decide that the doctor's privileges had been curtailed. The language of the exclusive contract and other evidence in the record described what was required for the practice of radiology, including specific references to radiological equipment and staff services. Because there was no question that those items and services had been denied Dr. Alfredson, his clinical privileges were

"as a matter of law ... significantly reduced," and the staff bylaws therefore required a hearing; having failed to provide a hearing, the Hospital committed a breach of the contract created by the bylaws. It remained only for the trial court to determine the proper damage recovery.

As a decision of the Court, *Lewisburg* is binding on all trial and appeals courts in Tennessee until and unless the Court overrules itself or the state legislature enacts a contrary statue. It is the law of the land, and physicians can and should expect hospitals to comply with it.

Hanlester and Freedom to Invest

The Hanlester Network was the general partner of three limited partnership ventures that operated three clinical laboratories in California.6 Those ventures and their officers asked area physicians to become limited partners in the three partnerships. The venture representatives told the physician investors that the laboratories' business would initially have to come from the physicians, that physicians who would make such investments were being sought as investors, and that failure to refer business to the laboratories would be a "blueprint for failure." The investment offerings were restricted to areas comprising physicians who made laboratory referrals, and the investing physicians were paid high returns on their investments. Furthermore, a medical director for two of the laboratories told certain limited partners that his records showed they were making too few referrals and that those referrals needed to increase. Worst of all, a laboratory marketing representative told investors that the return on their investment was "virtually guaranteed," that an off-the-record condition of sale was that each investor would make referrals, and that partners who made insufficient referrals would be pressured to increase their referrals or sell back their shares.

The Office of Inspector General (OIG) of the federal Department of Health and Human Services (HHS) became aware of this arrangement and brought its first administrative exclusion action against Hanlester, several of its officers, and the laboratories. This exclusion authority is granted in the Medicare Fraud and Abuse Act (the Act).⁷ It allows the OIG to exclude anyone, including physicians, from participation in the Medicare program, if it can prove that the person made, offered to make, solicited, or received improper "remuneration" for making referrals of patients or other health-related business. The OIG intended to make *Hanlester* a test case of its new enforcement power.

As an administrative agency, the OIG pursues its actions before an administrative law judge (ALJ). The OIG might have reasonably expected a friendly hearing before such a judge, but ALJ Steven Kessel dealt the OIG a stunning setback.

First, Kessel held that most of the activities enumerated above merely showed "encouragement" to make referrals, and that what the Act prohibits is something more than mere encouragement⁸; the Act actually forbids inducement.⁸ The ALJ decided that inducement means that a payment or offer, solicitation, or receipt of payment is *conditioned* on an agreement to refer

patients or other health care business. Offers or payments intended to influence the health care provider's choice, as opposed to actual agreements that foreclose provider choice, are not prohibited by the Act.

Applying this interpretation, the ALJ found that none of the respondents themselves (which included Hanlester, the three limited partnerships, and several of their representatives) had directly violated the Fraud and Abuse Act.9 He reached this conclusion by placing the questionable features of the investment arrangement in full context. The ALJ found that: the respondents did not specifically require that investors make referrals to the laboratories; return on an investor's investment was based entirely on the laboratory's total income, and not on the amount of referrals each partner made; the respondents specifically told the investors that it was illegal to participate in an investment scheme that required referral of health care business in exchange for remuneration; and there was no showing that the return on the physician investor's investment was excessive as compared to other such traditional investments in the health care field.

The ALJ did find that the marketing representative's acts had violated the Act. 10 Her actions exhibited an intent to condition sale of partnership shares on the investor's referral of patients to the laboratories. Due to the doctrine of respondeat superior (a principal is responsible for his agent's misdeeds), the marketing representative's bad acts were attributable to her employers (Hanlester and the three limited partnerships). However, the ALJ refused to impose a penalty on the employers. (The marketing representative herself had already settled out of court.) The ALJ reasoned that exclusion of the respondents would not have served the purpose of exclusion from the Medicare program, which is not to punish the perpetrator, but to protect the Medicare program.¹¹ The ALJ found there was nothing to protect against, because the respondents had not authorized the marketing representative's illegal activities (she had acted on her own), and they had fired her after having learned of her wrongdoing. Since her termination, the respondents had not engaged in any improper activities. There was, therefore, no reason to exclude the respondents from the Medicare program.

Note that the OIG could possibly have proceeded against the physician investors in the *Hanlester* decision. The fraud and abuse statute specifically prohibits both sides of the improper remuneration process; that is, it prohibits the making of payment on the one hand and the referral of business on the other hand. This is why this case is as significant for physician investors as it is for health care entities. To put it another way, *Hanlester* stands for the principle that a physician may safely invest in a health care venture that encourages referrals, but does not *require* referrals as a condition of investment.

The ultimate significance of this opinion is presently unclear. The OIG has appealed the ALJ's decision, and an opinion from the Appeals Board is not expected until August 1991. If upheld in whole or part, this decision

will have limited the OIG's broad interpretation of the Medicare Fraud and Abuse Rules. (Many of the specific features that the ALJ found were not violations in this case but were mere encouragement, were features that the OIG had, in a 1989 Fraud Alert, cited as indications of violations of the fraud and abuse statute.)

Ironically, this decision may have more impact on investors in health care ventures other than clinical laboratories than on investors in clinical laboratories. This is because the so-called Stark Bill will take effect in January 1992, strictly limiting physician investment in clinical laboratories to which they make referrals.13 However, if Hanlester is upheld, it will have given significant breathing room to joint ventures and investors in joint ventures in such other health care activities as ambulatory surgery centers, hospitals, and outpatient radiology centers.

The significance of this decision is also tempered by the possibility that, if upheld on appeal, it will be cited as justification of congressional restrictions on physician referrals to health care businesses in which they hold an interest.

Meaning for Physicians

Taken together, these two decisions represent victories for physicians' economic freedom. The first decision helps protect the physician in his relationships with hospitals. The second provides a degree of protection for the physician who desires to invest in health care ventures. This is not a bad start in a decade in which informed observers of the health care scene have expected increased regulation, attacks on fees, and rising malpractice premiums and recoveries.

Following are some specific pointers one may take from Lewisburg:

- Physicians should be aware of what their clinical staff privileges are. They should retain any and all written evidence of the extent of privileges, including actual written contracts, letters requesting privileges, and any hospital letters granting those privileges. This not only can serve as evidence of the extent of privileges at a hearing or a trial, but can increase sensitivity to reductions in your privileges.
- Physicians should be aware of their hospital's fair hearing procedures; these procedures, as part of the medical staff bylaws, are a part of a contractual relationship with the hospital, regardless of whether the physician has another contract with the hospital. Should a hospital fail to follow those procedures, even in part, it may have committed breach of contract.
- Hospitals will be as aware of the Lewisburg decision as physicians are. Physicians should, therefore, be on their toes for the possibility that future hospital contracts will include provisions waiving the right to a fair hearing.

The significance of Hanlester for physician investors in health care entities, if upheld:

 Avoid investing in health care entities if told investment return will be guaranteed, or where the sale of the investment unit is conditioned on referring business to the entity, or where told such referrals are expected. or where any part of the return on the investment will be based on the amount of referrals made. An agreement always takes two parties; by agreeing to make referrals in direct exchange for economic benefits, a physician investor risks OIG enforcement action.

- The investor should maintain records, clarifying that distributions to the investor will be based strictly on the health care venture's economic performance, and not on the individual investor's number of referrals. If the venture does not provide such information, the investor should record the understanding in a letter to the appropriate venture representative before purchasing any shares.
- An investor might, when receiving payments representing returns on his investment, write an acknowledgement letter to the venture explaining an understanding that payment was based on the venture's total economic performance, without regard to the amount of business the investor had referred to the venture.
- Remember, Hanlester, if upheld, indicates that a physician may legally refer business to a joint venture in which he holds an interest, and may even be encouraged to do so (unless, after Jan. 1, 1992, the venture is a clinical laboratory).
- An investor need not acquiesce in any venture's attempts to force the investor to sell back shares for having made insufficient referrals; such attempts are illegal.
- Those with responsibility for making decisions for a health care joint venture should remember this general rule: You may gently encourage referral of business, but you may not condition the sale of interests, or their continued ownership, on referrals.

Conclusion

In this era of growing regulation, physicians need to maximize use of the advantages that regulations and the law do give them. These two decisions provide rare opportunities for physicians to protect themselves. Those opportunities should not be overlooked.

1. 16 TAM 10-1 (Sup Ct, March 4, 1991). [Hereinafter Lewisburg]

3. In Nashville Memorial Hosp, Inc v Binkley, 534 SW2d 318 (Tenn 1976), the Supreme Court stated as a general rule (referred to by the Lewisburg Court as "dicta") that a private hospital may exclude physicians for any cause the hospital deems sufficient.

4. Lewisburg 14.

6. All of the facts reported here are findings of the administrative law judge in Inspector General v Hanlester Network, et al, Hutsinger and Welsh, Nos. C-186 through C-192, No. C-208, No. C-213 (HHS 1991). [Hereinafter Hanlester]

7. 42 USCA §§1320a-7, 1320a-7a, 1320a-7b.

8. Hanlester 61-65.

9 Hanlester 81-91.

10. Hanlester 84-85. 11. Hanlester 92-95

42 USCA §1320a-7b(b)(1).

13. 42 USCA §1395 nr

Those states include Connecticut, Florida, Illinois, New York, Pennsylvania, and South Dakota. Cited in Lewisburg, 9, 10 and in (MB) Health Care Law § 15.03[4] are: Gianetti v Norwalk Hosp, 211 Conn 51, 64, 557 A2d 1249, 1255 (1989); Pariser v Christian Health Care Sys, Inc, 816 F2d 1248, 1251 (8th Cir 1987); Posner v Lankenau Hosp, 645 F Supp 1102, 1106 (ED Pa 1986); Lawler v Eugene Wuesthoff Mem Hosp Ass'n, 497 So2d 1261, 1264 (Fla Dist Ct App 1986); Robinson v Magovern, 521 F Supp 842, 925 (WD Pa 1981), aff d 688 F2d 824 (3d Cir), cert denied, 459 US 971 (1982); St. John's Hosp Medical Staff v St. John Regional Medical Center, Inc, 90SD 674, 245 NW2d 472 (1976); Berberian v Lancaster Osteopathic Hosp Assoc, 395 Pa 257, 149 A2d 456 (1959); Nagib v St. Therese Hospital, Inc, 41 111 App 3d 970, 355 NE2d 211 (1976).

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HOWARD L. SALYER

A New Era Begins

This month marks a milestone in the history of the Tennessee Medical Association. As we enter another new era of medical history—an era which promises incredible technology and services that will enable us to save and better the lives of our patients—so does the TMA enter a new era of its history with the official opening and dedication of its new headquarters building at 2301 21st Avenue South in Nashville.

Let me emphasize to you that this building is *yours*—yours because the TMA represents you, the physician community, and because your efforts and support have made it possible.

The original TMA headquarters building, located on Louise Avenue here in Nashville and home to the TMA for more than 35 years, was dedicated in 1955 and improvements were made on the facility in 1971. Our new, three-story headquarters building has 21,500 square feet of floor space. The first two floors will serve as administrative staff offices for 22 TMA staff members, as well as offices for the TMA Auxiliary and ten medical specialty societies, and space on the third floor will be leased. The building is conveniently located 11 blocks south from Vanderbilt University Hospital (six blocks north of the intersection of I-440 and the 21st Avenue/Hillsboro Road exit), and ample, ground-level parking is available.

Our new headquarters building will be dedicated on July 13 at 11 AM, and I hope that you will make plans to join in the celebrations on that date. Should your professional and personal obligations keep you away from Nashville at that time, I hope that you will drop by the new facility and take a tour at a later date. When the 1992 TMA Annual Meeting takes place next April at Opryland Hotel, an Open House will be held for the entire membership.

I look forward to seeing you on July 13.

Hal h Salyer 4.D.

Building for Our Future

In 1955, the Tennessee Medical Association's new headquarters was built in the heart of Nashville's medical community. Located on prime mid-town property, TMA's 112 Louise Avenue address was perfect—surrounded by blocks of private physicians' offices between St. Thomas, Baptist, and Vanderbilt hospitals and the medical schools.

Some 35 years ago, TMA's main office accommodated a staff of five and leased office space to the Nashville Academy of Medicine for their executive director and a secretary. Since 1955, TMA's membership has increased from 2,360 members to last year's total of just under 6,500. As TMA's membership continued to grow, so did its needs for office space, and in 1971 an addition was made to the headquarters that doubled its size.



TMA's old headquarters: 112 Louise Avenue.

As both operations grew, the Nashville Academy moved to a nearby site in 1974 and TMA occupied the entire 6,000 square feet of useable office space. In 1971, TMA staff totaled seven and continued to operate in the same building until March of 1991. At the time of the move, the staff size had more than tripled, along with the increased number of internal programs.



Building Committee: Mr. Don Alexander, Drs. John Thomison, Hamel Eason, James Craig, William Miller, Mr. Hadley Williams, and Dr. Howard Salyer.

In 1985, the Board of Trustees recognized TMA's impending work space shortage, and a committee of three past presidents from Nashville (Drs. Tom Nesbitt, 1970; Morse Kochtitzky, 1973; and Jim Hays, 1979) was appointed to

assist the executive director, Hadley Williams, in locating appropriate and affordable properties for possible construction of a new headquarters building.

At first, it was not clear whether to relocate, renovate, or rebuild on the Louise Avenue property. Architects were consulted regarding the feasibility of another addition, but local building codes officials made it clear that TMA would have to acquire additional property in order to construct the type of facility necessary to house the Association over the next several decades. TMA had outgrown 112 Louise Avenue.

Not wanting to leave the general area that serves the

medical community, members of the search committee considered a number of properties in a rapidly growing professional development corridor six blocks south of Vanderbilt's campus, as well as land in the West End and Charlotte Avenue areas. The parcels of land between Hillsboro Village and the interstate have attracted many professional offices since the completion of I-440, Nashville's south bypass connecting interstates from Knoxville, Chattanooga, Birmingham, and Memphis. TMA's



Jackson, Continuing progress: summer 1990

new neighbors include doctors, dentists, architects, advertising and public relations firms, as well as other professional associations. The Tennessee Dental Association headquarters property is adjacent to the TMA parking area.

TMA purchased approximately one acre of land, then occupied by an aging efficiency apartment building. The Ashwood Court Apartments were razed, geological tests were conducted, and the land was made ready for construction. Site preparation and construction began in May of 1990 at 2301 21st Avenue South.

The projected moving date was December 1990, but adverse weather conditions and the usual building snags, matched against a market downturn for real estate sellers (i.e. TMA), delayed the move 60 days. On March 9, 1991, the long awaited relocation took place.

As staff and supplies moved to 21st Avenue only four weeks before the 1991 Annual Meeting in Memphis, the old building was sold on April 1, 1991 to Plaza Holdings, a subsidiary of the Loews Corporation out of New York, owner and operator of the Vanderbilt Plaza Hotel. Their tentative plans are to lease the property until developments for the hotel property expansion materialize.

TMA's new home is a three-story building, encompassing 18,500 square feet of work area (including three conference rooms); it is centrally located with easy access to

Architectural Perspective

Adkisson/Harrison & Associates Architects of Nash-ville was commissioned in the fall of 1989 to design a new headquarters facility for TMA. Our design process would be heavily influenced by the surroundings of the property. TMA's acre lot is bound by adjacent office buildings, low-density residential properties, and an architecturally significant fire hall.

We initially evaluated various options regarding the building footprint and number of stories. Throughout the early stages, we developed several basic parameters that would influence the design development process.

First, we were working with stringent zoning guidelines that included setbacks from the road, required parking, building height, etc. Plus, we were faced with a neighborhood association representing adjacent land owners who would ultimately influence the actual location of the building on the property.

Secondly, we wanted to "respect" the existing fire hall due to the residential scale and historic significance of the structure. Also, we did not want to crowd 21st Avenue as most of the contemporary office buildings in the area seem to do. In contrast, we wanted to create a "front yard" setting that would benefit the transition between office and residential uses.

As the design process evolved, we settled on a three-



story configuration of approximately 7,000 square feet per floor. The plan provides for perimeter offices with open-office/support areas located at the center core.

The ground level lobby provides an atrium effect with its two-story volume space and pedestrian bridge. Access to the board room and the third floor lease space are accomplished from both the front and rear of the structure without traversing the adjacent office areas.

The exterior facade reflects a "transitional" style that incorporates precast concrete panels, brick veneer, and an aluminum storefront/window casing system. Our intention was to create a relatively timeless appearance that would compliment the neighborhood and serve the TMA proudly for years to come.

-Kenneth C. Adkisson, Partner-In-Charge

interstates and main thoroughfares to accommodate both local members and members driving to Nashville. For those flying in, the airport is only 15 minutes away.

Staff presently occupies floors one and two, with offices for future expansion available on the second floor. The third floor contains an additional 6,500 square feet of functional floor space to fulfill long term TMA needs, and is presently being leased. The lease revenues, a portion of annual dues, and proceeds from the sale of the old building are being applied to the final building cost of \$1.28 million.

The new headquarters has ground level parking for more than 60 staff and visitors, with entrances from both 21st Avenue and the side street, Ashwood Avenue. The three conference rooms will allow more simultaneous meetings by TMA committees. Also occupying offices in the new head-quarters are staff for the following specialty societies: Internal Medicine, Geriatrics. Emergency Medicine, Pediatrics, Radiology, Anesthesiology, Orthopaedics, Obstetrics and Gynecology, Urology, and Ophthalmology, as well as the TMA Auxiliary and The TMA Association Insurance Agency, Inc.



A strong foundation to build on (top right). Close attention to detail (bottom right) in the lobby area. The back parking lot (below) off of Ashwood Avenue accommodates more than 60 vehicles.





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JULY, 1991

editorials

A New Address

Unless you are singularly unobservant, or maybe mistook this issue of the *Journal* for one of your many throw-aways, you doubtless concluded that though maybe not special in itself, it had in it at least a special message for you. If that is what you concluded, you were correct. I shan't pursue that any further.

Assuming that such was your conclusion, you doubtless had also already determined from the pic-

ture on the front cover what that message might be, and didn't need the rather obvious title of this piece to tell you. I think I needn't pursue that any further, either.

A year ago this past March the *Journal* presented several reasons why your TMA Board of Trustees believed your already seemingly burdensome dues needed increasing again, the major reason being that the Association's facilities were bursting at the seams, having no space left with which to add all of the programs you, its members, were calling upon it to add. The membership again demonstrated that reason could, though maybe not without a struggle, overcome their natural inclinations toward penury, and thus the resolution to construct a new head-quarters building for the Association cleared your House of Delegates with relative ease.

Confident that the membership could be counted on to act responsibly, or at least what the Board considered responsibly, the Board had begun laying some groundwork a few months earlier, and had been shopping for a site for maybe a year before that, but within a little more than a year of initiation of the actual planning, the building had been completed, and by the time of our 1991 Annual Meeting the Association was firmly, even if not necessarily tidily, ensconced in its new digs.

Those of our members, which includes committees and so on, who have visited the new building have been impressed and pleased. Certainly the staff can now function much more efficiently and effectively in carrying out its assigned duties, and that is important not only to them, but to us as well, and not necessarily in that order, either.

You will doubtless note a good deal of repetition from one part of this issue of the *Journal* to another. That happened because we are all proud of what has been accomplished for you, and we want to be sure not only that you know about it, but also that you will make plans to take advantage of the upcoming opportunity to visit the building and receive the Grand Tour. Not that you couldn't do that at any other time, but this time is special. The new headquarters building of the Tennessee Medical Association is to be dedicated on Saturday, July 13, at 11 AM. It has been over 30 years since the last such occasion, and one would think that it likely will be at least that long until there is another, though of course no one knows that. For those of you who will be attending the TMA Annual Meeting in Nashville next spring, plans are in the works for an Open House sometime during that meeting.

One time or another, y'all come, ya hear?

J.B.T.

The Juris Doctor

You wouldn't believe the jams an editor can find himself in. The other day a colleague phoned to warn me that another colleague was hot on my trail for what he considered gross malfeasance on the part of your dear (I hope) old (sad, but true) editor. Colleague B had stormed into Colleague A's office waving a page ripped from our last issue (April 1990) and shouting something like, "Look what that blankety-blank idiot has done. He has a lawyer advising doctors on how to treat intestinal obstruction. I never even heard of this blankety-blank tube. How can it be any good? He ought to be drummed out of the service [or something]!!!"

I put the piece in here only because I had thought that after having had to publish so many irate missives from disaffected patients, two of them in that very same issue of the Journal, it just might be nice and restful to put in something from a patient who was grateful, for a change. That the patient happened to be a lawyer was simply a coincidence. I thought it not illogical that the patient had described his treatment. In such a situation I might not have gotten everything right, either. I will ignore the obvious question of how, if our colleague had never heard of the blankety-blank tube, he knew it was no good, anyway. I will give him the benefit of the doubt and assume he didn't mean it couldn't have been any good simply because he had never heard of it. (Will you?) Two other fairly obvious things that come to mind are, first, no doctor (or anybody else, for that matter) should ever assume that there is anybody at all he could not learn something from, even a lawyer; and second, doctors are always giving advice to innocent bystanders about all sorts of things outside their competence, so why not lawyers? No one has to listen, including Colleague B. For the record, I had never heard of the Thow tube either, though it wouldn't be expected that I would have. My lawyerfriend sent me some literature on it, and it is legitimate. (And so, I should point out, is the surgeon who used it; it is not unlikely that Colleague B knows him well.) In addition, it's hard to argue with a satisfied customer. But again, as I pointed out, the piece was not intended as a testimonial to anything but patient satisfaction, which is in something of short supply these days.

The most appalling thing of all to me about the whole thing, though, is that any of our readers could bring himself to believe that I would expect anyone, and not just doctors, to accept something written by a patient (who just happened to be a lawyer) as being medical gospel. (Of course, it's done all the time;

witness copper bracelets, for instance, as treatment for arthritis. I even know doctors who tried them. I got a catalog the other day that said "Smooth sailing! Natural relief from motion discomfort!" It seems that if you buy a pair of their wrist bands for \$24.50, the little plastic ball in the band will press on the nerves of your wrist and short-circuit "the impulses that disrupt equilibrium" and make you seasick. Doubtless those sell well, too.) For our colleague's information, and yours too, if you are worried about it (though I would certainly hope our colleague's case is an isolated one), I did not so expect.

What I do expect, though, is that you will accept *legal* advice from lawyers when I put it in here, as I have done in this present issue of the *Journal*. There are two articles, both written *by lawyers*, that have to do with contractual relationships. Those relationships are not simple, and, as many of our colleagues have found to their sorrow, they cannot be ignored. So I would encourage you to read, and take to heart, those two articles, one of them by our staff attorney, Marc Overlock. They may save you a bundle of grief, among, possibly, some other things as well.

J.B.T.

A Celebration

You might not recognize it as such, so I'm telling you up front that this is your Fourth of July editorial, sort of. It has to do with a hero and the celebration of an important event, though it happened in May, and only (only?) 100 years ago instead of 215. But you can handle that, I bet. Its consequences also weren't as far reaching, but they were far reaching enough. They were cultural, but that has to do with freedom, too—as much, in fact, as almost anything else.

One Sunday afternoon a little over half that time ago (the 100, not the 215, though sometimes it seems the longer)—August the something or other 1939, to be as specific as possible, considering its distance—my parents and I and my younger brother were tooling along the Pulaski Skyway with me at the helm headed into New York City and its World Fair. Bumper to bumper and cheek by jowl with countless other like-minded citizens, we were moving along at what I thought was a respectable pace—one that, I might add, I had, under the circumstances, little to do with—to the distress call of an affrighted mother, to wit: "Slow down! Slow down! Slow down! . . ." as though such were possible. Exiting the Holland Tunnel, I was, quite naturally, in the wrong lane for get-

ting to the Pennsylvania Hotel, and a query to a policeman, likely resulting in stoppage of traffic for miles back into New Jersey, evoked the response that to get to where I wanted to go was not possible from where I was, and that what I needed to do was go back to wherever it was I had come from and start over again. With that, being a kindly, red-faced Irishman, and possibly sensing a kinsman from my red hair, that stalwart of New York City's finest proceeded to stop all traffic, with heaven knows what consternation and confusion aft, thereby allowing me to get into the proper lane to make a left turn. Over the half-century since, I have allowed myself to get caught driving in New York City traffic only once again, with results that were similarly inconvenient. I have also continued through all that time to harbor a warm feeling in my breast for NYC cops; in all of my many trips there I have never been given a reason to feel otherwise. Some, I'm relatively certain, just might feel otherwise. But I digress.

We had gone to New York specifically to visit the World Fair, and we went out to Flushing Meadows first thing Monday morning. We stayed until after the evening performance of Billy Rose's Aquacade, which was late. I think that sometime during the week we must have gone back, but as it turned out, the city itself offered too many blandishments enticing the visitor to stay in the city.

Someone once observed that if one has no money, there is no point in living in New York City, whereas if one has a lot of money, there is no point in living anywhere else. The contrary view was expressed by a friend of mine who had interned at Bellevue Hospital during the Great Depression; he indicated that in New York there was always something interesting to do that didn't cost anything. Of course, there were, and are, too a lot of things there that cost a lot. We did some of both. One of the things I remember is going to a concert at Carnegie Hall, which is about all I remember about Carnegie Hall. I remember a lot more about the Aquacade and Olson and Johnson's Hellzapoppin at the Schubert Theater. I was in Carnegie Hall one other time later on, sometime in the late '50s, before its near-terminal illness. The old lady, as she was referred to, didn't look all that terminal to me, being no grimier than her neighbors, but there was talk even then of razing her. As time went on, despite her glorious history neither the city nor the state of New York would raise a hand to save her, nor would the federal government. She was sitting on an extremely valuable piece of real estate, and was in such disrepair that the very thought of restoration was daunting. She appeared doomed to share extinction with such other New York landmarks as the old Madison Square Garden, which, unlike its replacement, was actually on Madison Square, and the beautiful, classic Pennsylvania Station. Grand Central was able to survive only by serving as the base for a skyscraper. It appeared Carnegie Hall would receive no such reprieve, and in 1960 the wrecking ball was poised. She desperately needed a champion.

She found one in the brilliant concert violinist Isaac Stern, at the age of 40 already mentioned in the same breath with Jascha Heifetz and Yehudi Menuhin as among the world's premier performers. Since making his debut with the San Francisco Symphony at the age of 11, and his New York debut at Town Hall in 1937 at the age of 17, Stern could already claim a distinguished concert career. He says simply that he decided Carnegie Hall was worth saving, and therefore bent a major part of his efforts toward that end. And in the end-25 years and \$65 million later—he succeeded. He did it by taking the campaign to the people. Most of the labor and much of the materials were donated by New Yorkers. The Hall, restored to its original splendor and structurally sounder than ever, had its grand reopening in 1986. Mr. Stern is its president, I guess for as long as he wants to be. And why not?

What I believe is not appreciated by the public generally is the magnitude of the facility and the extent of its services. In addition to the magnificent 2,800-seat concert hall, there are 140 studios in the block-square building, some of them comprising hundreds of square feet; it is there that over the past hundred years vast numbers of the great and near great in the performing and visual arts have perfected their craft.

At the birthday party they gave the lady yesterday, aired on public television, she didn't look a day older than she must have looked on the day she made her debut in May 1891, so grand was she. The great composer Peter Ilyich Tchaikovsky came from Russia to conduct the orchestra for her debut, and there were performances by notables from over the world. Her hundredth birthday was celebrated in no less sumptuous style. The fete was hosted by the incomparable Brooklyn-born soprano with the flaming hair, Beverly Sills, who, with her capable co-host, ABC anchor Peter Jennings, had a marvelous assemblage of masters and divas to introduce.

According to Peter Jennings, the famous author Anon. once said that you can describe music, but you can never explain it; it is a part of the soul of man. Though its form may vary according to heritage, custom, and tastes, no people has ever been without its music, and music certainly has never been without its

day, hour, minute, and second in this our blessed land, and music is a part of the heritage of every fiber of every ethnic group that comprises it. All of these forms have found expression on the stage of Carnegie Hall, and through the technology of the recording industry, radio, and television, it has all become a part of our common heritage as Americans. It is sad that so many of us speak of ourselves as Afro-Americans or Hispanic-Americans or Japanese-Americans or Native Americans, instead of just Americans. If we learned nothing else from the American Civil War, it should have been what happens when citizens place another allegiance before that of country.

Though neither music nor Carnegie Hall is what we celebrate on the Fourth of July, they are among the things that make the Fourth worth celebrating. Each of us has his druthers, and you may not like opera or country music or violin music or jazz or bluegrass or what have you; but somebody does, and it may be the fellow next to you. What is not widely appreciated is that all of those and many more have appeared on the stage of Carnegie Hall. Carnegie Hall is an American institution, and her birthday is worth our notice. Since that is so, does not her savior, Isaac Stern, qualify as a hero? He is for me more of a hero than the \$4-million-a-year southpaw on the Wilkes-Bagel, Pennsyltucky baseball team, 40 shutouts a year for the past five notwithstanding.

You stick to your heroes and I'll stick to mine, and you celebrate however and whatever you wish. However that may turn out, together we'll enthusiastically celebrate Independence Day, through which we still have the right to celebrate whatever and however else we wish. Keeping it that way is worth whatever it costs. What it costs is the best efforts of every American, with no exceptions.

J.B.T.



TMA Impaired Physician Committee

To the Editor:

I read with much interest the article in the April issue of the *Journal* by Dr. Charles Thorne, entitled, "The TMA Impaired Physician Peer Review Committee—A Progress Report" (*J Tenn Med Assoc* 84:199-201, 1991). This historical perspective was, in my opinion, sorely needed, and no one is more qualified to detail it than Charles. The article was exceedingly well done.

Please permit me, at the risk of being presumptuous, to add one small tidbit of information. The ad hoc committee designated by the TMA Board of Trustees in April 1978 served until the program was implemented. The members of that committee were:

Howard Foreman, M.D., Nashville Ray Mayberry, M.D., Louisville Charles Smith, M.D., Nashville Howard Thomas, M.D., Savannah Charles Thorne, M.D., Nashville John Dorian, M.D., Memphis Don Alexander, TMA Staff

In my judgment, these seven served, sacrificed, and sweated. As apparent, the only two who have served continuously from launch to the present are Dr. Thorne and Mr. Alexander.

All performed mightily and should share equally in the fame/notoriety. Perhaps the latter deserve an oak leaf cluster.

John B. Dorian, M.D. 6005 Park Ave. #500 Memphis, TN 38119

new member

The Journal takes this opportunity to welcome these new members to the Tennessee Medical Association.

BLOUNT COUNTY MEDICAL SOCIETY Fredric M. Radoff, M.D., Alcoa

KNOXVILLE ACADEMY OF MEDICINE

Michelle L. Brewer, M.D., Knoxville Daniel W. Cotten, M.D., Knoxville M. David Stockton, M.D., Knoxville Kenneth F. Trofatter Jr., M.D., Knoxville

NASHVILLE ACADEMY OF MEDICINE

Frank Martin Berklacick, M.D., Nashville William Edward Garrett, M.D., Hendersonville Washington Clark Hill, M.D., Nashville Gregory Bryan Lanford, M.D., Nashville D. Mark Mahler, M.D., Nashville Jason Drew Morrow, M.D., Nashville Sharon Marie Piper, M.D., Nashville Edmund J. Rutherford, M.D., Nashville Alfred Shousha, M.D., Nashville Thomas Francis Shultz, M.D., Nashville

(Student)

Lee Loes, Nashville

WASHINGTON-UNICOI-JOHNSON COUNTY MEDICAL ASSOCIATION

Robert G. Dunworth, M.D., Johnson City Thomas L. Huddleston, M.D., Johnson City Edward S. Rollins, M.D., Johnson City



Evelyn Edith Dresner, age 69. Died April 14, 1991. Graduate of George Washington University School of Medicine. Member of Knoxville Academy of Medicine.

Walter P. Griffey Sr., age 87. Died April 22, 1991. Graduate of Vanderbilt University School of Medicine. Member of Henry County Medical Society.

TMA Members Receive AMA Physician's Recognition Award

The following TMA members qualified for the AMA Physician's Recognition Award during April 1991. This list, supplied by the AMA, does not include members who reside in other states.

Physicians can receive the PRA certificate valid for one, two, or three years. For the one-year award, physicians report 50 hours of continuing medical education, including 20 hours of Category 1; for the two-year award, physicians report 100 hours of CME, including 40 hours of Category 1; for the three-year award, physicians report 150 hours of CME, 60 of which are Category 1.

Stuart P. Bacon, M.D., Dayton Harvey H. Barham, M.D., Bolivar Hugh G. Barnett II, M.D., Jackson John M. Bishop, M.D., Somerville Warner L. Clark, M.D., Church Hill James P. Craig, M.D., Elizabethton Anh H. Dao, M.D., Nashville Buford P. Davis Jr., M.D., Pulaski Raymond A. Finney Jr., M.D., Maryville Albert S. Garrett Jr., M.D., Knoxville Robert B. Gaston, M.D., Donelson John W. Hammon Jr., M.D., Nashville Don C. Harting, M.D., Cleveland Mark F. Hartley, M.D., Waverly David F. Hassell, M.D., Knoxville John E. Hutchison Jr., M.D., Bristol Sue P.W. Johnson, M.D., Shelbyville Harry M. Lawrence Jr., M.D., Chattanooga Keith H. Loven, M.D., Madison Augustus L. Middleton, M.D., Jackson Tony J. Montgomery, M.D., Clarksville Harry K. Ogden, M.D., Knoxville Charles L. Roach, M.D., Sevierville William H. Roberts, M.D., Jackson Wen T. Shiao, M.D., Nashville Archibald Y. Smith III, M.D., Signal Mtn. Homer Lee Staley, M.D., Lawrenceburg Robin M. Stevenson, M.D., Memphis Grafton H. Thurman, M.D., Madison Joe R. Troop Jr., M.D., McMinnville John O. Williams Jr., M.D., Mt. Pleasant Eugene J. Winter, M.D., Nashville

Vonnie A. Hall, age 83. Died February 28, 1991. Graduate of University of Tennessee College of Medicine. Member of Memphis-Shelby County Medical Society.

James Cecil Lowe, age 75. Died May 14, 1991. Graduate of University of Tennessee College of Medicine. Member of Bradley County Medical Society.

Henry Gordon Rudner Jr., age 66. Died May 6, 1991. Graduate of University of Tennessee College of Medicine. Member of Memphis-Shelby County Medical Society.

announcements

CALENDAR OF MEETINGS

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NATIONAL							
Aug. 10-16	Society of Magnetic Resonance in Medicine Inc (Scientific Meeting and Exhibition)—San Francisco Hilton and Towers						
Aug. 16-20	American Society for Pharmacology and Experimental Therapeutics—Town & Country, San Diego						
Aug. 22-28	Association of Medical Illustrators—Fairmont, New Orleans						
Sept. 3-8	American Academy of Neurological and Orthopaedic Surgeons—Ballys Grand Hotel, Las Vegas						
Sept. 5-6	American Gynecological and Obstetrical Society—LaCosta, Carlsbad, Cal.						
Sept. 11-15	American Thyroid Association—Boston						
Sept. 12-17	College of American Pathologists—Hilton, New Orleans						
Sept. 22-27	American Society of Maxillofacial Surgeons—Washington State Convention Center, Seattle						
Sept. 24-27	American Group Practice Association—Hilton Hawaiian Village, Honolulu						
Sept. 26-29	American Academy of Family Physicians— Hilton, Washington, D.C.						
Sept. 27-29	American Academy of Facial Plastic and Reconstructive Surgery—Hyatt Regency, Kansas City, Mo.						
Sept. 27-29	American Society for Adolescent Psychiatry—El Dorado, Santa Fe, N.M.						
	STATE						
Sept. 12-14	Tennessee Chapter, American Academy of Pediatrics and Tennessee Pediatric Society— Reed House, Chattanooga						
Sept. 13-15	Tennessee, North Carolina, and South Carolina Societies of Anesthesiologists (Joint						

	Carolina Societies of Affestinesiologists (Joint					
	Meeting)—Grove Park Inn, Asheville, N.C.					
Oct. 17-19	Tennessee Society of Internal Medicine and					
	Tennessee Chapter, American College of					
	Physicians (Joint Meeting)—Park Vista					
	Hotel, Gatlinburg					
Oct. 22-25	Tennessee Academy of Family Physicians,					
	43rd Annual Scientific Assembly—Gatlin-					
	burg Convention Center and Holiday Inn					

Gatlinburg



OWNED AND PUBLISHED BY THE ASSOCIATION

AUGUST, 1991 VOL. 84, NO. 8

Failure to Use Safety Belts: A Call to Arms for Tennessee Physicians

KENNETH E. OLIVE, M.D.

Introduction

Deaths due to motor vehicle accidents are a significant public health problem in the United States. In 1988, 50,060 lives were lost in motor vehicle accidents, making this the sixth leading cause of deaths in the nation.1 It has been well demonstrated that passengers who wear safety belts at the time of an accident have a lower mortality rate than those not wearing safety belts. While a wide variation in effectiveness of safety belts in reducing mortality has been reported, overall efficacy appears to be 50%.² Because of widespread publicity regarding the safety advantage of wearing safety belts, it would be reasonable to assume that many people would wear them. In fact, this is not the case. In surveys conducted from 1981 to 1983, 76% of the U.S. adult population reported that they did not use safety belts.³ In these surveys, safety belt use in Tennessee was approximately the same as the national average. More recent data indicate that belt use in states with belt laws averages about 50%.4 Tennessee, however, had the lowest belt use among such states—27%. This brief study began as a casual observation that a surprising number of drivers and passengers on an interstate highway were not wearing safety belts. The

purpose of this study was to determine the frequency of safety belt use by front seat passengers in vehicles traveling faster than 65 miles per hour on a Tennessee interstate highway.

Methods

Between 7:00 and 7:30 PM Eastern Daylight Time on Friday, April 20, 1990, I traveled southbound on U.S. Interstate 75 north of Knoxville, at a continuous speed of 65 miles per hour. Any vehicle that passed mine was eligible for inclusion in this study. Front seat passengers were observed to determine whether or not they were wearing safety belts. Passengers were considered to be wearing a safety belt if a shoulder harness could be seen extending across the chest; conversely, they were considered not to be wearing a safety belt if the shoulder harness could be seen hanging unfastened. The status of passengers not meeting either of the above criteria was considered indeterminate.

Results

During the study period, 18 vehicles with 33 front seat passengers were eligible for inclusion in the study. Five front seat passengers in three separate vehicles were excluded because of indeterminate safety belt status (one vehicle due to high speed, two vehicles due to vehicle configuration). Thus, the safety belt use of 28 front seat passengers was determined, and these passengers comprise the study

From the Department of Internal Medicine, James H. Quillen College of Medicine, East Tennessee State University, Johnson City.

Reprint requests to Department of Internal Medicine, James H. Quillen College of Medicine, PO Box 21160A, Johnson City, TN 37614 (Dr. Olive).

group. Eighteen of the 28 passengers (64%) were not wearing safety belts, and 10 (36%) were wearing safety belts.

Discussion

Despite the extensive publicity given the benefits of using safety belts, in this study 64% of the evaluable front seat passengers of vehicles traveling in excess of 65 miles per hour on a Tennessee interstate highway were not wearing safety belts.

Unfortunately, the low frequency of safety belt use found in this study is not a sampling error due to the small sample size. Large-scale studies of safety belt use conducted by the University of Tennessee's Transportation Center at 300 locations throughout the state comprised approximately one-half million people.⁵ While their observations indicate that safety belt use has increased from 26% before Tennessee's belt law was approved to 41% three years after its approval, the majority of Tennesseans still do not use safety belts. For physicians, these data should be cause for concern, since this means that most of their patients are not availing themselves of this simple, effective lifesaving practice, though experience in other countries has shown that usage rates as high as 95% can be achieved.4

Being aware of this problem, the concerned physician can intervene in at least two ways. The first is by serving as a role model by wearing a safety belt himself when traveling. For the physician in a community where there is frequent contact with patients while traveling, this is especially important. The significant effect of physician-modeling of behavior has been demonstrated for cigarette smoking, and may occur as well for use of safety belts.⁶ Certainly when a patients sees his physician driving without using a safety belt, the unspoken message is that safety belt use is not important. The second way in which physicians can intervene is by advising their patients to use safety belts. Physician advice has been demonstrated to increase safety belt use from 38% to 60% in a private pediatric group practice.⁷ Thus, Tennessee physicians should not despair over the low use of safety belts in our state, but should take action.⁸

Thousands of lives are lost in motor vehicle accidents each year. Many passengers in Tennessee may be denying themselves a chance to save their life by failing to use safety belts. Physicians should be alarmed by this situation, and aggressively work to increase safety belt use among their patients.

Acknowledgments

Dr. Stephen H. Richards, Director, University of Tennessee Transportation Center, kindly provided data from studies conducted by his center which were useful in preparing this manuscript. Angie Rines prepared the manuscript.

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April 1992								
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Laser Bronchoscopy

TONY KATRAS, M.D.; ROGER MIRANDA, M.D.; NGHIA VO, M.D.; PAUL HOLLIER, M.D.; and PAUL E. STANTON, M.D.

Introduction

The application of laser technology to the tracheobronchial tree in the treatment of malignancy has continued to expand, adding an exciting new dimension to bronchology and thoracic surgery. Endoscopic application of laser technology began in 1973 with the use of carbon dioxide laser therapy to ablate benign neoplasms such as tracheobronchial papillomas and later to palliate obstruction of the major airways.¹

Today airway obstruction from tracheobronchial malignancy has become a common indication for laser bronchoscopy. Initial experience was with the CO₂ laser and more recent experience has been with the neodymium:yttrium-aluminum-garnet (Nd:YAG) laser.² This report presents our experience with Nd:YAG laser bronchoscopy at the Affiliated Hospitals of East Tennessee State University in Johnson City, Tenn., from October 1985 to June 1990. It represents a unique period for this center because it includes the initial use of endoscopic laser technique, the learning curves associated with its application, and the time when its use became routine.

Materials and Methods

We made a retrospective review of 30 cases in which the patients were treated with the Nd:YAG laser, and extracted the following information from each chart: (1) type of laser treatment, (2) diagnosis, (3) indication for treatment, (4) type of anesthesia, (5) postoperative course, (6) success of procedure, and (7) morbidity and survival.

The Nd:YAG laser system allows the delivery of laser light through flexible optical fibers, allowing resection of tumor by vaporization and effective coagulation and hemostasis of larger vessels. It produces excellent vaporization, with sizable scatter and penetration to 5 to 10 mm from the focal point.

The high thermal energy produces vaporization, coagulative necrosis, and coagulative hemostasis.

Results

Of the 30 patients whose pulmonary lesions were treated, 26 had obstructing carcinomas of the trachea or the mainstem bronchi; symptoms of early airway obstruction were lessened or completely relieved in 17 (65%). The average survival of patients successfully treated was three months, with apparent improvement in quality of life. One patient lived for ten months after laser therapy. On the other hand, the average survival for those in whom laser therapy failed to relieve the obstruction was one month; many of those patients were very poor surgical risks, in whom the major reason for failure was that the tumor was too large and too rapidly growing. Frequently more than one endoscopic session was needed to completely open a channel. Complications of treatment were minimal. One patient developed hypoxemia during the laser treatment and afterwards refused further treatment; this was the only complication in this series.

Four other patients with benign pulmonary lesions were successfully treated by laser; two had tracheal polyps, and two had severe squamous metaplasia. The overall success rate for the treatment of pulmonary lesions was 70%. Sixty-three treatments were performed on these 30 patients.

Discussion

Palliation of obstructing endobronchial tumors by the Nd:YAG laser has attracted much interest. The tumors can be denatured and photocoagulated and the necrotic material removed with grasping forceps, with creation of a new lumen through which the patients can breathe. Some clinical results have been dramatic, as x-rays demonstrate reventilation of previously occluded lungs.³

Indications for therapy with the Nd:YAG laser include (1) partial or complete intraluminal obstruction (primary or secondary tumor), (2) obstruction of main airways—trachea, carina, main bronchi, and

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LASER BRONCHOSCOPY/Katras

bronchus intermedius, (3) initial local control of hemorrhage and obstruction produced by adenomas (definitive treatment is surgery), and (4) recurrent local malignancy after surgery and radiation therapy.

Contraindications to Nd:YAG laser therapy include (1) obstruction due to extrinsic compression, (2) obstruction without cartilaginous support of the airway, (3) obstruction with tracheoesophageal fistula, (4) lobar or more distal occlusions, (5) total obstruction for more than four to six weeks with no probable distal airway, and (6) bleeding diathesis.⁴

At present, the most successful laser palliation for proximal airway obstruction due to malignancy is obtained with the Nd:YAG laser. It is used initially to relieve symptoms of obstruction, and can be followed for a more prolonged effect by external beam radiation therapy or brachytherapy; this is its most common use. The procedure is very safe once familiarity with the technique has been achieved, only two deaths having been reported in 1,500 consecutive

treatments; many of those patients were extremely compromised.5

Conclusion

We found the Nd:YAG laser to be effective in the treatment of both malignant and benign tumors of the tracheobronchial tree. It can often be used without anesthesia as an outpatient procedure, and patients who are poor candidates for surgery benefit especially. Palliation with the laser gave better quality of life in the majority of patients. Very low morbidity and no mortality were associated with laser therapy.

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HELP FOR IMPAIRED PHYSICIANS

Through its Committee on Impaired Physicians, TMA helps doctors who are suffering from alcoholism and drug addiction. The thrust of the program is rehabilitative, not punitive. The Committee is composed of physicians who have special expertise in these areas, some from personal experience. Effective treatment for these illnesses is achieved most easily when the disease is detected early; family, friends, and associates are urged to avoid misguided sympathy which enables the condition to deteriorate.

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Traumatic Hemipelvectomy

J.P. SPIERS, M.D.; MARTIN A. CROCE, M.D.; and TIMOTHY C. FABIAN, M.D.

Few injuries so graphically illustrate the extreme violence of blunt trauma as does the traumatic hindquarter amputation. Survivors of this injury are rare, and are typically young, otherwise healthy men. Motor vehicle accidents account for almost 80% of these injuries, with industrial mishaps comprising the remainder. This unique open pelvic fracture requires aggressive surgical management coupled with extensive psychological and rehabilitative support. The following case illustrates principles of successful management of this typically lethal injury.

Case Report

A 30-year-old man was transported to the Presley Regional Trauma Center from a regional hospital approximately one hour after being involved in a motorcycle accident in which he had been struck by a car and trapped in its undercarriage. On arrival the patient's blood pressure was 100/60 mm Hg with a heart rate of 140/min; he was awake and alert and complained of excruciating right hip and lower abdominal pain. Initial examination revealed a widely disrupted open pelvis and a pulseless, insensate right leg attached to the torso by only a 20-cm band of posterior skin. A urethral catheter was in place, and there was no gross hematuria. There was minimal bleeding at the site of injury, and the peritoneum was intact.

Fluid resuscitation had been instituted, and the patient was taken to the operative suite where the hemipelvectomy was completed with ligation of the iliac vessels, which had retracted and were minimally bleeding. The sciatic nerve, which had been disrupted near the spinal foramina, was ligated. The rectum had sustained several lacerations, though the sphincteric apparatus appeared intact. The bladder and right ureter were visible in the wound, and both appeared intact, though the right ureter was skeletonized by the injury; an injection of dye yielded no extravasation. There was a superficial laceration on the right hemiscrotum but no other injury to his external genitalia. Laparotomy revealed no major intra-abdominal injury, and a colostomy was performed for fecal diversion. The pelvic wound was primarily closed using a posterior cutaneous flap salvaged from the avulsed extremity, with the placement of closed suction drains. The patient was taken to the intensive care unit where he had further resuscitation and completion of his secondary survey (Fig. 1).

The patient initially did well, but when on the third postoperative day his temperature went up and his wound showed signs of infection, debridement and revision of his closure was done. Several days later he developed a ureterocutaneous fistula, which resolved spontaneously. His wounds subsequently healed, and his hospital course was complicated only by depression and phantom leg pain. With intensive physical rehabilitation the patient rapidly progressed to walking with a prosthesis. He was discharged 49 days after his injury, and continues to do well.

From the Department of Surgery, Division of Trauma, University of Tennessee College of Medicine, Memphis.



Figure 1. The initial postoperative pelvic film. Note the complete absence of the right hemipelvis, the drains, and the downward displacement of the abdominal contents towards the wound.

Discussion

Elective hemipelvectomy was first performed by Bilroth in 1889; the first patient survived only six hours.² In 1945 a survivor of traumatic hemipelvectomy was reported in Australia, but not until 1960 was a survivor reported in the United States.^{3,4} Since 1945 only 40 survivors of this catastrophic injury have been reported. The typical survivor is male, approximately 20 years old, and in good health. The youngest survivor was 7 years old, the oldest 34.¹

The mechanism of injury appears to be extreme hyperabduction coupled with external rotation. Most of these injuries resulted from motor vehicle accidents, though 20% resulted from industrial or farm accidents. Associated intra-abdominal injuries are common, and survival depends upon prompt, aggressive surgical treatment, which usually includes repeated debridement of the wound, and close cooperation of orthopaedists, urologists, and plastic surgeons.

The injuries sustained in the traumatic amputation can be divided into several subsets, including vascular,

genitourinary, orthopaedic, neurologic, and gastrointestinal. Of primary concern are the major vascular structures entering the hemipelvis. Fortunately, survivors will usually have spasm of their iliac artery and vein, greatly reducing hemorrhage. In patients who have minimal bleeding it is important to avoid exploration of the amputation site before surgery, as exposure of these vessels is difficult under such circumstances and manipulation may initiate uncontrollable hemorrhage. Immediate control of pelvic hemorrhage often necessitates emergency external fixation of the pelvis, and while this might make the idea of salvaging the avulsed pelvis attractive, the massive contamination and compromise of tissue make this a poor option. Packing of the pelvic wound can control less vigorous bleeding and can help maintain the integrity of the peritoneal cavity until definitive surgical exploration.

The urologic injuries are variable, though some injury is almost always found. The bladder may be avulsed or ruptured, and the urethra is often disrupted. Primary diversion may be necessary, with delayed reconstruction of the injured structures. The ureter on the involved side may be denuded or transected. Our patient had no injuries to the bladder or urethra, but did develop a ureterocutaneous fistula, probably as the result of the compromised vasculature of the traumatically skeletonized ureter. Urinary tract reconstruction is often necessary, and some patients with extensive urinary tract damage will ultimately be incontinent of urine. The genitalia are often involved, with testicular avulsion as frequent as urethral disruption.

Over 15% of associated injuries are orthopaedic, and some of these can be distant from the injured pelvis. One unfortunate youth who was struck by a train had not only his left hindquarter amputated, but his left upper extremity as well.⁵ Fractures of the contralateral hemipelvis must be aggressively treated since the strain on the remaining structures is magnified, particularly if the patient is ever to walk. Remarkably, 90% of these surviving patients will walk again with either a prosthesis or crutches.

The gastrointestinal tract is rarely spared injury. The rectum is usually injured, and its sphincter often rendered nonfunctional. The peritoneum is often intact, though this does not preclude intra-abdominal injury. Abdominal exploration is mandatory, and even in the

absence of intra-abdominal injury, a colostomy with distal rectal washout should be performed to divert the fecal stream. Placement of the stoma should be distant from the pelvic wound to minimize the chances of fecal soilage.

Closure of the large defect is perhaps the most challenging of all aspects of the management of these injuries. Repeated debridement and irrigation of the wound is frequently necessary. Initial coverage of the wound is desirable in order to protect the exposed structures. One source of material for wound coverage is the amputated lower limb, from which skin may be harvested for grafting. A patient whose limb is not completely avulsed may have a posterior flap of skin and muscle that might be acceptable for initial closure. The use of suction drainage devices minimizes the accumulation of fluid in the space. Some authors recommend a planned second operation at 24 to 48 hours when there is concern for the viability of covered tissue or there appears to be a septic focus in the closed wound.² Infection is common despite broad spectrum antibiotics, emphasizing the need for adequate debridement initially and at subsequent wound explorations. Various myocutaneous flaps may be considered later to provide further coverage.

Success of surgical management marks the beginning of the arduous task of rehabilitation for the patient. Subjects are prone to depression, and this can cause a protracted hospital course. One patient spent over eight months in the hospital, mostly due to depression.⁶ The ability to use a prosthesis is a psychological triumph as well as a physical one, and the patient typically shows great improvement with each ambulatory milestone. Most will eventually learn to walk with crutches or a prosthesis.

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Stiff Neck and Fever in a Nursing Home Patient

Case Report

A 76-year-old woman was admitted to Vanderbilt Univer-

sity Hospital (VUH) for evaluation of fever.

The patient has organic brain syndrome, and resides in a nursing home. Her behavior is combative and aggressive, and she receives loxapine for control of this behavior. Ten days before admission to the VUH, her responsiveness decreased, and she had a stiff neck and fever to 103°F. She was admitted to a local hospital, where cerebrospinal fluid (CSF) analysis revealed no white blood cells, a normal opening pressure, and normal protein and glucose; no organisms were seen on gram stain. The loxapine was discontinued and ceftazidime was prescribed. *Staphylococcus aureus* subsequently grew in a culture of her urine. Her mental state improved, and she was discharged to the nursing home after five days. Her medications at discharge were loxapine 25 mg three times daily and cefuroxime 500 mg twice daily.

The patient did well until the fifth day after discharge, when the staff noted lethargy, flushing, and shivering. On arrival at the VUH, the patient was mumbling incoherently and not responding to commands. Her temperature was 103.6°F, blood pressure 170/104 mm Hg, and pulse 116/min. Examination of the lungs, heart, and abdomen were normal. Her neurologic examination revealed increased motor tone and mild cogwheel rigidity in both upper extremities. There was a resting tremor of both hands. Laboratory studies revealed a CPK of 399 IU/L (normal 30 to 210). Her CSF was clear and colorless, and contained 1 mononuclear cell and 5 red blood cells; glucose was 55 mg/dl (normal 45 to 75) and protein 20 mg/dl (normal 30 to 60). Blood, urine, and CSF cultures were

negative, and a CT scan of the head was normal.

Neuroleptic malignant syndrome (NMS) was suspected, and the loxapine was discontinued and intravenous fluids and antipyretics administered. When her fever, muscular rigidity, and unresponsiveness persisted for six days, bromocriptine was

prescribed, and over the next four days she became more alert. Her temperature and muscle rigidity decreased, but previous agitation returned. Trazodone 25 mg at bedtime was prescribed

upon discharge to the nursing home.

Discussion

Antipsychotic, or neuroleptic, medications are widely prescribed in this country. They are used to treat a variety of psychiatric and nonpsychiatric disorders, including schizophrenia, mania, depressive disorders, brief reactive psychoses, intractable hiccups, and agitation. While side effects of these drugs occur routinely at therapeutic doses, most adverse reactions are not lifethreatening. NMS, however, is a severe and potentially lethal complication of neuroleptic drug use, occurring in

up to 0.5% to 1% of all patients exposed to neuroleptics.² An understanding of its clinical features is important, as early intervention is necessary for reducing the morbidity and potential mortality of this underrecognized entity.

NMS occurs in all age groups. It has been associated with a variety of antipsychotic drugs, including phenothiazines, butyrophenones (e.g., haloperidol), and dibenzodiazepines (e.g., clozapine). Haloperidol is the most frequently prescribed neuroleptic, and is also the drug most frequently causing the NMS.³ The syndrome may occur at any neuroleptic dose, although it appears to be more common at higher dosages. Over half of the patients with NMS had previous exposure to neuroleptic drugs, while the remainder developed the syndrome on initial exposure.⁴

NMS is characterized by autonomic and extrapyramidal dysfunction. The most common clinical features include fever, hypertonicity of skeletal muscles, mental status changes, and autonomic dysfunction. The skeletal muscle abnormality leads to a "lead pipe" rigidity of the extremities in over 90% of patients.⁴ Akinesia, tremors, and other involuntary movements may also be seen. Rigidity of chest wall muscles may result in decreased compliance, with resulting hypoventilation and tachypnea.² The autonomic dysfunction is manifested as blood pressure instability, diaphoresis, tachycardia, and cardiac arrhythmias. Almost all patients have fever, which may be as high as 105°F. The syndrome typically lasts five to ten days after discontinuation of the drug.^{2,3}

Laboratory abnormalities are nonspecific. The CPK is usually elevated, and very high CPK levels may lead to renal failure in rare instances. Mild to moderate leukocytosis is also common, and in combination with fever leads to the misdiagnosis of infection. The CSF is usually normal.

Supportive care is the mainstay of therapy. All neuroleptic and anticholinergic agents must be discontinued when the diagnosis is suspected, and intravenous fluids and antipyretics should be administered. Dantrolene, a directly acting muscle relaxant, has been used to treat this syndrome. The muscle relaxation and subsequent fall in temperature reduce oxygen consumption. Bromocriptine, a dopamine agonist, has also been

Prepared by Kathleen Maletic Neuzil, M.D., Hugh J. Morgan chief medical resident, Vanderbilt University Hospital, Nashville.

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Radiology Case of the Month

STEVEN M. WEINDLING, M.D.; CHARLES L. ROBINETTE JR., M.D.; and STEWART STOWERS, M.D.

Case Report

A 33-year-old man gave a two-week history of gradually enlarging tender mass over the right knee posterior joint line. He denied acute or chronic knee trauma. Physical examination revealed a firm fixed nodular mass just behind the superficial medial collateral ligament. The knee was stable, with a small effusion. Pain on weight bearing restricted the patient to walking with crutches.

MRI sagittal gradient echo images revealed horizontally oriented increased signal intensity within the medial meniscus (Fig. 1), which was found on adjacent images to extend to the meniscal surface. Coronal gradient echo images revealed a 2.5 × 1.3-cm vertically oriented ovoid hyperintense septate mass along the medial meniscus base, with medial deviation of the overlying medial collateral ligament (Fig. 2). The adjacent medial distal femoral condyle and medial tibial plateau were normal.

What is your diagnosis?

(1) Ganglion

(2) Tendon sheath giant cell tumor

(3) Meniscal cyst

(4) Synovial herniation

(5) Popliteal cyst

Arthroscopy of the right knee showed an extensive, complex, degenerative tear of the middle and posterior thirds of the medial meniscus. During a subtotal medial meniscectomy, the communicating channel between the meniscal tear and the cyst was identified. After the interior of the cyst was debrided arthroscopically, the cyst resolved spontaneously, and the patient was asymptomatic at the time of follow-up examination.

Discussion

Meniscal cysts are parameniscal collections of mucinous material or synovial fluid associated with meniscal horizontal cleavage tears.^{1,2} Involvement of the lateral meniscus is four times more common, and while lateral cysts tend to be restricted to the joint line, medial cysts frequently dissect along fascial planes. The predominant theory of etiology suggests that synovial fluid is forced out through the meniscal tear, and accumulates at the meniscocapsular margin to form a cyst.³ It is therefore not surprising that meniscal cystrecurrence is common unless the meniscal tear is addressed at surgery.

On MR, meniscal cysts appear as ovoid lesions with low signal intensity on T_1 -weighted spin echo images, and high signal on T_2 -weighted spin echo or T_2 *-weighted gradient echo images. In one study, septations were seen in four of 11 meniscal cysts,² and were present in our patient (Figs. 2 and 3). MR demonstration of a tear extending into a meniscal cyst correlates with a club-shaped contrast medium collec-

From Radiology Consultants, Inc. (Drs. Weindling and Robinette) and Nashville Orthopedic Associates (Dr. Stowers), Nashville.

tion at the periphery of a meniscal tear described at arthrography.⁴ MR identification of the cleavage tear's extension through the meniscal base (Fig. 3) is helpful in preoperative surgical planning if arthroscopic cyst removal is anticipated.

Ganglions may mimic the more common meniscal cysts, arising as outpouchings of the lateral joint cap-



Figure 1. Sagittal T_2^* -weighted gradient echo image demonstrates a horizontal well-defined cleft of increased signal intensity within the medial meniscus base (arrows).



Figure 2. Coronal T₂*-weighted gradient echo image reveals a septation (black arrowhead) within an ovoid high-signal intensity mass (asterisk). The mass lies along the medial meniscus base (white arrows) and laterally displaces the medial collateral ligament (black arrows)



Figure 3. Coronal T₂*-weighted gradient echo image posterior to Fig. 2. A second septation (black arrowhead) is seen within the mass (asterisk). The location of the horizontal tear's extension through the medial meniscus base is identified (white arrowheads).

sule. While ganglions and meniscal cysts appear as high intensity masses on T₂-weighted images, lack of associated horizontal meniscal cleavage tear helps to distinguish ganglions. Popliteal cysts (Baker's cysts) typically arise between the medial head of the gastrocnemius muscle and the more lateral semimembranous muscle. Nonhemorrhagic popliteal cysts demonstrate signal intensities similar to those of meniscal cysts and ganglions, yet would not occur along the meniscal base and displace the medial collateral ligament as in our patient. Synovial herniation and tendon sheath giant cell tumors at this location are rare, and would more likely appear heterogeneous.

FINAL DIAGNOSIS: Meniscal cyst.

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successful in decreasing rigidity, tremors, and temperature.^{2,3} There are no controlled trials comparing dantrolene, bromocriptine, and supportive measures. Retrospective reviews and isolated case reports suggest that dantrolene and bromocriptine significantly shortened time to clinical response.³ One prospective analysis of 24 episodes of NMS showed an increased time to clinical response after the administration of bromocriptine.⁴

In summary, NMS may occur in any patient exposed to neuroleptic drugs. It is characterized by fever, muscular rigidity, and autonomic dysfunction. Although un-

common, this syndrome is potentially life-threatening. Practicing clinicians must therefore be aware of this entity, and promptly discontinue neuroleptics when the diagnosis is suspected.

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Results of 1990 Immunization Survey of 24-Month-Old Children

JOE BEAVER, B.S.; ROBERT HUTCHESON JR., M.D.; and KERRY W. GATELEY. M.D.

The 1990 immunization-level survey of 24-monthold children has been completed, showing the statewide level of complete immunization at 24 months of age to be 72.0%. Generally, levels in metropolitan areas were lower, averaging 65.7% of the 24-month-old children fully immunized; in rural areas they were higher, averaging 76.6%. As a group, those served by health departments had immunization levels higher than the statewide average—77.2% and 72.0%, respectively.

Public health departments served 54.3% of the survey population, and private physicians served 31.5%. Most of the remainder, 12.8%, were served by a combination of public and private providers. Twenty-three children, or 1.3%, could not be located, and were assumed to be unimmunized.

Administratively, the Department of Health has divided the state into ten regions, four rural and six metropolitan. Chattanooga, Knoxville, Memphis, Nashville, Madison, and Sullivan Counties comprise the metropolitan regions, with the other counties comprising the four rural ones.

Regional variations in the immunization levels showed that (1) overall immunization levels range from a low of 47.6% in the metropolitan Shelby County region, to a high of 84.9% in the rural West Tennessee region; (2) the immunization levels of health department patients ranged from a low of 43.0% in the metropolitan Shelby County region to a high of 91.1% in the metropolitan Sullivan County region; (3) the immunization levels for patients of private physicians ranged from a low of 59.0% in the metropolitan Hamilton County region to a high of 76.7% in the Middle Tennessee rural region.

The survey population was a random sample chosen from birth certificates in each health region. All samples except the metropolitan Sullivan County region were drawn from March 1988 births; because of a special administrative need, the Sullivan County sample was

Figure 1. Percentage of 24-month-old children who are fully immunized—1984 to 1990 immunization survey data.

drawn from December 1987 births. Deaths, adoptions, and those who had moved out of state were excluded from the sample; those who moved about within the state remained in the sample. For 1990, of 5,471 births in the survey months, 1,842 were selected as the beginning sample, and a final sample of 1,715 children was surveyed. For these children, immunization information was elicited from available medical records at the county health department, the physician's office, or the home of the child. Information based on recall alone was not included in the survey. Only 23 children (1.3%) could not be located; they were assumed to have had no immunizations.

By definition, "fully immunized" means that the child has received four doses of DTP, three or four doses of polio vaccine, and one dose each of measles, mumps, and rubella vaccines. Data on *Haemophilus* vaccine were collected but not included under "fully immunized."

The percentage of children receiving one dose of *Haemophilus* vaccine by 24 months of age was 52.4%. *Haemophilus* immunization ranged from a low of

PERCENT

100%

80%

60%

1984

1985

1986

1987

1988

1989

1990

YEAR

STATEWIDE

HEALTH DEPT.

From the Communicable Disease Control Section, Tennessee Department of Health, Nashville.

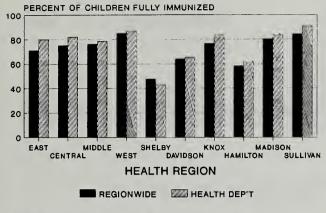
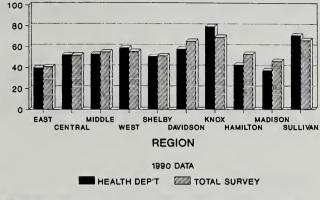


Figure 2. Comparison of regional immunization levels of 24-month-old children for 1990.



PERCENT

Figure 3. Percentage of 24-month-old children with *Haemophilus* vaccine by region in 1990.

37.3% in the metropolitan Madison County region to a high of 79.5% in the metropolitan Knoxville region.

These data are insignificantly lower than the 1989 data, which showed overall immunization levels of 73.4% for that year. The graphs (Figs. 1-3) show the percentage of 24-year-old children who are "fully immunized" over a period of several years, a comparison of regional immunization levels for 1990, and the percentage of children with *Haemophilus* vaccine by region in 1990.

While these data may seem impressive, there are some sobering thoughts to consider. First, 28% of the children in the sample were not fully immunized by 24 months of age. Second, from 1989 to 1990, there was no significant progress toward the program goal of a 90% level of immunization at 24 months of age. Final-

ly, a review of the recent yearly levels of "fully immunized" children at 24 months of age reveals a stagnation of progress toward the 90% goal that spans more than the last two years.

While progress has been made in immunizing the state's preschool children, much remains to be done. Perhaps a more critical review of patient records is required to identify those in need of immunization. Perhaps more emphasis should be placed on recalling those children who have missed appointments in order to fully protect them. Whatever the reason, unimmunized children represent an excellent opportunity for the resurgence of vaccine-preventable diseases. These diseases may be forgotten, but they are not gone! We have the tools at hand to eliminate vaccine-preventable diseases; we need only apply them.

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J. KELLEY AVERY, M.D.

Case Report

A 52-year-old patient reported to a surgeon considered to be a "breast specialist" with a history of tenderness in the right breast. The patient first noticed the tenderness about one month before her visit to the physician, and because she was knowledgeable about breast disease, she delayed her appointment to be sure that the tenderness was not related to her menses. The doctor examined her breasts and located the area of tenderness without difficulty. The surgeon was not sure about the presence of a mass, but she informed the patient that she suspected that there was a small "lump" in the region of the point of maximum tenderness.

A mammogram was ordered and the report was somewhat surprising in that the radiologist recorded "a focus of microcalcification in the central portion of the right breast." The patient was obese with very large breasts and the tenderness did not seem to be in the area of the calcifications. The surgeon recommended to her patient that a biopsy be done under general anesthesia followed by a modified radical mastectomy if the frozen section was positive for malignancy.

Six days after the patient first visited the surgeon the biopsy was done and the report was suspicious for cancer but not diagnostic. The day after the biopsy the excised specimen was x-rayed and "no micro-calcifications" were present. The report suggested that a repeat mammogram be done after healing had occurred. The patient did not return as suggested in the pathology report. There was no documentation in the attending physician's office chart as to whether or not the patient was advised of the recommendation of the pathologist.

About one year later, on a routine follow-up visit, the patient's attending physician reported to her that the "final diagnosis was normal." A repeat mammogram was recommended in three months.

Subsequent office visits documented healing of the surgical scar. The patient lost weight following her surgery which was attributed to her own efforts at dieting. Three months later, which was 15 months after the initial biopsy, the mammogram showed "increase in mass density—the presence of micro-calcifications—recommend excisional biopsy."

The excisional biopsy was performed as indicated and the frozen section was reported orally to the operating room as "infiltrating ductal carcinoma." A modified radical mastectomy was done. The day following the surgery the report from the pathologist was "unequivocal diagnosis of carcinoma cannot be made on this specimen." Following exhaustive review of the specimen by several pathologists, the final diagnosis was "sclerosing adenosis."

A lawsuit was filed charging the pathologist with negligence. The contention was that the oral report of "infiltrating ductal carcinoma" should not have been made until after the permanent sections had been examined. The pathologists called as expert witnesses could not agree that the diagnosis of "infiltrating ductal carcinoma" was within a reasonable standard. A settlement was necessary in the case.

Loss Prevention Comments

Most all of us would agree that radical surgery should never be done until after a final diagnosis has been made. We are not infallible, however, and this was a confusing case. There had been a previous biopsy, and in retrospect, we could say that the area in the initial mammogram that was suspicious was not a part of the excised specimen. The specimen did not contain the micro-calcifications that were most suggestive of malignant disease.

When the pathologist suggested a repeat mammogram after "healing" had occurred, he surely did not contemplate that the surgeon would delay the examination for a year. In the light of subsequent events, it seems that the pathologist so strongly suspected malignancy that when he saw the second biopsy specimen his diagnosis was tilted toward his strong assumptions. Consequently, he gave the oral report of carcinoma.

The surgeon was not sued, but there is certainly room to question her management of her patient. She did not insist on the repeat mammogram and follow-up, as suggested by the pathologist. Although the surgeon said that she verbally instructed her patient to return for the recommended mammogram, the patient denied it, and there was no supporting documentation. In this confusing set of circumstances, the surgeon accepted without question the verbal report of the pathologist and performed a deforming surgical procedure on her patient.

There is not universal agreement that, even in the presence of confirmed carcinoma of the breast, the "one-stage" biopsy followed by immediate definitive/radical surgery offers a better prognosis than waiting a sufficient time to get the "final diagnosis."

In these days the pressure is on to expedite the diagnosis and treatment of our patients. Outpatient surgery for the biopsy and an inpatient admission for a radical procedure is cumbersome, to say the least. One could argue that in this case, the perceived need to rush through its management contributed to the outcome, which was certainly not satisfactory to either the patient or the physicians involved.

Perhaps we should daily remind ourselves that our patients deserve careful and considered management regardless of the bureaucratic hassle, which seems to be getting worse by the day.

Dr. Avery is chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood, and associate director of Medical Affairs, St. Thomas Hospital, Nashville.

TMA Reaches Broad Audiences Through Radio

ROBERT BOWERS, M.D., Chairman
TMA Communications and Public Service Committee

As part of our Community Awareness, Resource, and Education (CARE) program, the Tennessee Medical Association is making an effort to communicate *better* with our patients all across the state. To that end, in 1990 more than 12 million Tennesseans heard what the TMA had to say on a variety of health and medical subjects through a statewide program of six radio announcements. The public service announcements aired 2,888 times on 110 urban and rural radio stations across Tennessee from Sept. 17 to Nov. 4.

The radio program is such an effective way to reach the general public with the Association's messages that we will repeat it again this year. Radio is the most costeffective way to reach a large audience that includes both urban and rural patients, as well as our Association members.

In 1991, the TMA is airing those same public service announcements which will run for nine weeks from Sept. 16 to Nov. 11 on these stations:

- WDEF-FM and WDEF-AM in Chattanooga
- WTJS-AM and WTNV-FM in Jackson
- WIVK-FM in Knoxville
- WGKX-FM, WREC-AM, and WDIA-AM in Memphis
- WLAC-AM, WZEZ-FM, WSM-AM, WSM-FM, and WKDA-AM in Nashville
 - WXBQ-FM in Tri-Cities
 - 73 stations of the Tennessee Radio Network.

The announcement topics include why patients sometimes have to wait, which explains why schedules can run behind; communication between doctors and patients, which encourages patients to ask questions; an explanation of the Tennessee Medicare Access Program (TMAP) and how patients can benefit from it; health habits to encourage patients to take a more active role in promoting their own health; new technology and its advantages, as well as the importance of caring professionals behind it; and the importance of following the doctor's orders.

We chose those topics based on our research conducted for the CARE program telling us the issues that are most important to our patients.

Two of the six spots—health habits and new technology—will air in this fall's campaign. "Talk open and honestly with your doctor," says the health habits message. "Ask questions. And answer questions as thoroughly as possible. This is key. Because when we listen to one another, we are taking steps toward a solution to *your* medical problem."

The new technology spot says, "Just a generation ago, diseases like polio and tuberculosis took thousands of lives. Today, you hardly ever hear about those diseases. That is because modern technology has given us advances such as new drugs and vaccines, machines that provide detailed pictures of the body, and other sophisticated equipment . . . We are excited that the advanced technology available to us is improving the quality of life in Tennessee."

We hope these messages will stimulate your patients not only to follow our suggestions for better health, but also to ask you questions on their next visit. Improved communication can help us reach more patients with information for improved health care.

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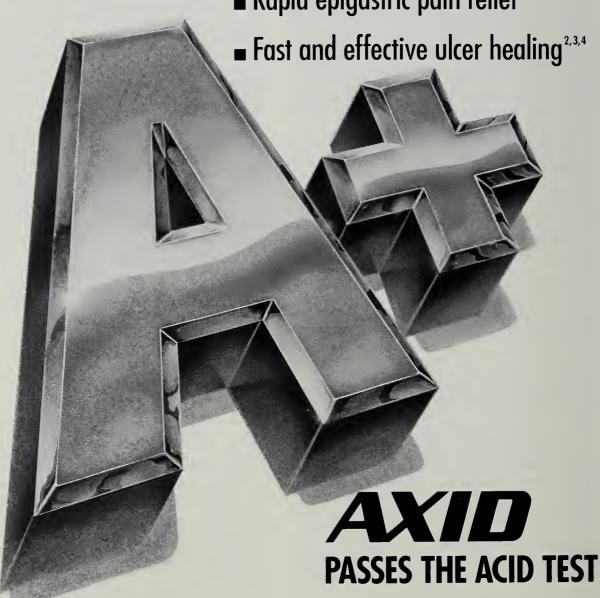
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*Most patients experience pain relief with the first dose. See adjacent page for references and brief summary of prescribing information.

AXID® (nizatidine capsules)

Briel Summary. Consult the package insert for complete prescribing information. Indications and Usage: 1. Active duodenal ulcer—for up to 8 weeks of treatment. Most patients heal within 4 weeks.

2. Maintenance therapy—for healed duodenal ulcer patients at a reduced dosage of 150 mg hs. The consequences of therapy with Axid for longer than 1 year and known.

are not known.

Contraindications: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H₂-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other

Frecapito national continuous war a mission of hypersensimity to utier H₂-receptor antagonists.

Precaulions: Ceneral – 1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Ossage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is smillar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix* may occur divise theraps.

2. Ubsages tout one terebuck in potential with more and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laborabry Tests—False-positive tests for urobilinogen with Multistix* may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, forazepam, lidocaine, phenyloin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg bit. Ay was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kday (about 80 dimes the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dos-related increase in the density of enterochromatifin-like (ECL) Joels in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, atthough hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Fermale mice given the high dose of Axid (2,000 mg/kg/day, about 300 times the human dose) showed marginally statistically significant increases in heap carcinoman dhepatic nodular hyperplasia with no numerical increases seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The temale mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent ontrols and evidence of mid liver nigury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of accinogenic effect in sta, male m

growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use — Safety and effectiveness in children have not been established. Use in Elderly Patients — Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse ReaCollons: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (19% vs. 02%), urlicaria (0.5% vs. 0.01%), and somnolence (2.4% vs. 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events were due to the drug.

**Hepatic—Hepatice-Illular injury (letvated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine cocurred in some patients. In some cases, there was marked elevation (>500 IUIL) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IUIL. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were eversible after discontinuation of Axid. Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic valure and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid. Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic valurations and charkyacidia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CWS—Rear cases of reversible mental confusion have been reported.

ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.
CWS—Rare cases of reversible mental confusion have been reported.
CWS—Rare cases of reversible mental confusion have been reported in the confusion of the confusi

also reported.
Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis
tollowing inizitidine administration have been reported. Rare episodes of hypersensitivity
reactions (e.g. bronchespasm, laryngeal edema, rash, and eosinophilia) have been reported.
Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported.
Eosinophilia, fever, and nausea related to nizatidine have been reported.
Overflosage. Overdoses of Axid have been reported rarely. If overdosage occurs,
activated charcoal, emesis, or lavage should be considered along with clinical
monitoring and supportive therapy. Renal dialysis does not substantially increase
clearance of nizatidine due to its large volume of distribution.

Reterences
1. Oata on file, Lilly Research Laboratories.
2. Scand J Gastroenterol. 1987;22(suppl 136):61-70.
3. Scand J Gastroenterol. 1987;22(suppl 136):47-55.
4. Am J Gastroenterol. 1989;84:769-774.

Additional information available to the profession on request.



Eli Lilly and Company Indianapolis, Indiana 46285

Y()(C())YOHIMBINE HC

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimula-tion and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce periphcomplex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug. 1.2 Also dizziness, headache, skin flushing reported when used orally. 1.3

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence. 1.3.4 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.3

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

- A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
- Goodman, Gilman The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85
- 3. Weekly Urological Clinical letter, 27:2, July 4,
- A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Gifts to Physicians From Industry

Introduction

While relationships between industry and the medical community have resulted in important benefits for patient care, there has been growing concern about the potential, negative consequences of the relationship. In particular, commentators have increasingly questioned the appropriateness of some of the gifts that are given to physicians by companies in the pharmaceutical, device, and medical equipment industries. Many gifts serve an important and socially beneficial function. For example, companies have long provided funds for educational programs and facilities. Some gifts, however, may have inappropriate effects and are therefore cause for concern. This report discusses the ethical issues raised by the practice of industry gift-giving and proposes guidelines for physicians to distinguish appropriate from inappropriate gifts.

Gift-Giving Practice

Gift-giving by industry can take many forms. Companies typically provide physicians with ballpoint pens, penlights, note pads, and other inexpensive items upon which is printed the name of the company or one of its products. Hospital residents are often treated to lunches or dinners by sales representatives. Companies also sponsor medical conferences that have been developed by hospitals, medical schools, or professional associations. Their sponsorship often takes the form of a speaker, general support, or specific underwriting grants and includes hospitality suites, dinners, and cash payments to registrants to defray the costs of attending the conference. In some cases, companies will pay the full costs for a physician to attend a conference in another state or another country and offer to pay for additional days of vacation at the conference site.

Some companies put on conferences with speakers who are selected by the company and who discuss the company's products. These conferences are typically held at attractive locations, and some physicians are flown in with their spouses for a weekend of presentations, recreation, and entertainment, all at company expense. A company will often direct its invitations at physicians who are viewed as leading practitioners by other physicians in their community. The companies

recognize that practices adopted by these "leaders" are generally followed by their peers. Companies schedule individual speakers to speak to groups of physicians over dinner at no cost to the physicians, and some companies will pay \$100 to each physician who attends the dinner to compensate for the physician's time. It has been reported that a few companies also have given physicians gifts or cash payments for every patient who was started on a particular drug.^{1,2}

Some of these practices are entirely ethical and beneficial to patients, and not all companies engage in them. In addition, the rules regarding the propriety of the practices have not been clear. Recognizing the lack of clarity, the medical profession and the pharmaceutical industry have been supportive of change. A Task Force on Pharmaceutical Industry/CME Cooperation chaired by the AMA is now actively reviewing the guidelines for industry support of continuing medical education (CME).

Ethical Concerns

The practice of gift-giving raises a number of ethical concerns.

Influence on Physician Practices. Industry invests in promotional activities because promotions increase sales. As one commentator has observed, no company "gives away its shareholders' money in an act of disinterested generosity." There is no evidence that physicians knowingly or intentionally compromise their patients' care as a result of gifts from industry. Nevertheless, the practice of gift-giving may mobilize subtle influences that can result in practice patterns based on considerations that go beyond scientific knowledge and patient needs.

In a recent article examining the cultural phenomenon of gift-giving, researchers observed that the giving and accepting of a gift can lead to important social relationships with real obligations.⁴ By accepting a gift, an individual "assumes certain social duties, such as grateful conduct, grateful use, and reciprocation."⁴ Salespersons have long recognized the social implications of gift-giving; surveys indicate that gifts to potential buyers are given in the belief that gifts tend to obligate their recipients and that they are therefore useful for increasing sales.⁵

Physicians do not respond to gifts from industry by giving gifts in return. However, there are other ways to reciprocate and express gratitude. The physician may be

This is AMA Council on Ethical and Judicial Affairs Report G, submitted to the House of Delegates at its Interim Meeting in Orlando in December 1990.

more responsive in granting interviews to sales representatives and may, on the basis of the information presented, decide to use a new drug or device on a trial basis with his patients. In a study of industry funding for CME, researchers found a relationship between the source of funding and physician prescribing practices. The study examined prescribing patterns of physicians both before and after they attended one of three CME courses. The courses in the study met the following criteria: a single drug company was the major financial supporter of the course, the course topic was directly related to a single class of drugs with at least three drugs in the class, and the drugs were essentially similar in terms of benefits, side effects, and costs. While after each course there were increases in the prescribing of all drugs in the class, the greatest effect occurred for the drug whose company was the major financial supporter of the course.6

Gift-giving can influence physician practices also because a person's judgment about a product is affected by considerations other than the product's quality. When a physician receives a gift from a company's sales representative, the physician may associate his feelings about the gift or the sales representative with his feelings about the company's products. A recent study indicates that the receipt of a gift may have an important effect on a potential customer's perception of a product, even when the gift is a small one.⁷

Gifts may affect a physician's education regarding new developments in medicine by influencing the physician's choice of medical conferences. Physicians frequently rely upon medical conferences to update their knowledge and expertise. Among the available conferences, physicians have time to attend a limited number, and industry can make certain conferences more attractive by subsidizing the costs of attending. Companies will direct their subsidies at conferences that provide the most favorable view of their products.

Through the presentations of sales representatives to physicians, companies tend to emphasize the results of clinical research supporting both the efficacy and the lower cost of their products as compared to competing products of other companies. Physicians, in prescribing for their patients, therefore must ensure that they are knowledgeable about the full range of research regarding the benefits and possible adverse reactions to pharmaceutical and other products, and must provide their patients with full information on risks and potential complications. The continued use of new or established products must be based on the response of the individual patient and the preponderance of evidence from all clinical trials, as well as neutral sources of information such as the American Medical Association's widely used Drug Evaluations. Gifts should have no part in influencing these decisions.

The concern about undue influence from a gift is particularly strong when the gift comes with strings attached. A company that donates funds to underwrite a CME conference may want a role in shaping the pro-

gram, for instance by selecting speakers from its own panel of experts, selected for their knowledge and experience in the use of the company's products. These experts may show bias with regard to use of the company's products, thereby undermining the objectivity and impartiality of the educational activity.8

While there is little evidence that physicians consciously make practice decisions on the basis of factors other than a product's clinical properties and the patient's particular needs, some research suggests that physicians unknowingly may be influenced by promotional techniques. In a study of physician prescribing of propoxyphene (Darvon) for analgesia and cerebral vasodilators for senile dementia, researchers found that physicians in substantial numbers were likely to use these drugs in situations that could not be justified by evidence in the clinical literature. Instead, these physicians held beliefs about the efficacy of the drugs that were consistent with information found in commercial advertisements for the drugs.

In describing these potential problems with gifts to physicians, the Council has not lost sight of the need for physicians to receive the broadest possible exposure to new and different health care products and their clinical applications. Unquestionably, patients have obtained some benefit even from gifts and other practices which may, on balance, be too substantial to be considered appropriate. For some physicians, the events and conferences described above have been a means through which they stay abreast of rapidly occurring advances in medicine and hear and interact with noted colleagues discussing new products and developments in their field. These events have been of genuine educational value to this extent, and they have expanded the universe of clinicians receiving research support from pharmaceutical and other companies.

Appearance of Impropriety. Even when gifts from industry have no effect on a physician's practices, there may be a public impression of impropriety, especially if the gifts are of substantial value. The trust of the public that physicians are dedicated foremost to the welfare of their patients may be undermined when there is a possibility that the choice of a drug, device, or other product is influenced by the fact that the physician had received a gift from the company that manufactures the product. For example, when companies schedule their own conferences at resorts and pay for physicians and their spouses to attend for a weekend that includes only a few hours of lectures and many hours of recreation, lavish meals, and expensive entertainment, it is difficult to view the conference as serving a legitimate educational purpose.10

Strict limits on the acceptance of gifts to avoid even the appearance of impropriety have been adopted in other contexts. Federal government employees, including physicians at Veterans Administration hospitals, may not accept gifts from companies whose products or services they are using, 11 and federal judges may not accept gifts from persons whose interests have come or

are likely to come before the judge.¹² Companies in industry also generally impose limits on the acceptance of gifts by their employees. In a survey of manufacturing firms, a researcher found that 50% of the firms did not permit their employees to accept gifts other than pens, pads, or items of comparable value; 24% of the firms permitted gifts up to \$50 in value to be accepted but only on an occasional basis.¹³ In addition, in a survey of purchasing agents for industrial companies, the agents agreed that it is unethical to accept entertainment, tickets, gifts, or other favors from sellers.¹⁴

The appearance of impropriety may also arise because of the magnitude of company spending on promotional activities, including gifts. According to one estimate, pharmaceutical companies spent about \$2.5 billion per year for all their promotional activities in 1988. Specific data on what portion of this can be attributed to gifts to doctors is not available beyond estimates that \$200 million is spent annually by the pharmaceutical industry for medical education. In it is not clear how much is spent on promotional activities for physicians by companies that manufacture or distribute devices and medical equipment.

Costs of Gifts. The costs of gifts from industry to physicians are ultimately passed on to the public. In effect, then, patients may be paying for a benefit that in some cases is captured primarily by their physicians. Physicians should not accept inappropriate gifts because the cost is ultimately subsidized by patients.

The Council recognizes that many gifts from industry to physicians result in significant benefits to patients. For example, books and conferences contribute to the education of physicians, and meals at medical meetings or conferences provide a forum for colleagues to exchange information. These kinds of gifts can therefore be appropriate, depending on the extent to which the gift serves a function beneficial to patient care and on whether the same benefits can be realized through less costly promotional activities.

Guidelines for Gifts from Industry to Physicians

The ethical considerations discussed above suggest several principles.

1. Any gifts accepted by physicians individually should primarily entail a benefit to patients and should not be of substantial value. Accordingly, textbooks, modest meals, and other gifts are appropriate if they serve a genuine educational function. On the other hand, cash payments serve only the physician's personal interest and therefore should not be accepted from industry.

A gift which is appropriate because of its contribution to patient care may become inappropriate because of its extravagance.

Gifts of minimal value raise fewer concerns and are permissible as long as the gifts are related to the doctor's work (e.g., pens, diaries, books, or rulers).

2. Gifts by drug companies to underwrite medical

conferences or other professional meetings enhance the ability of academic institutions, professional associations, and health care organizations to provide continuing education to physicians. Consequently, such gifts make an important contribution to patient care. Subsidies from industry should not be accepted to pay for the costs of travel, lodging, or other personal expenses of physicians attending conferences or meetings, nor should subsidies be accepted to compensate for the physicians' time. Subsidies for hospitality should not be accepted outside of modest meals or social events held as a part of a conference or meeting.

It is appropriate for faculty at conferences or meetings to accept reasonable honoraria and to accept reimbursement for reasonable travel, lodging, and meal expenses. It is also appropriate for consultants who provide genuine services to receive reasonable compensation and to accept reimbursement for reasonable travel, lodging, and meal expenses. Token consulting or advisory arrangements cannot be used to justify compensating physicians for their time or their travel, lodging, and other out-of-pocket expenses.

The giving of a gift directly to a physician from a company's sales representative may create a personal relationship which could influence the use of the company's products. Accordingly, when a company contributes funds for conferences that are sponsored by academic or other educational institutions, the funds should be given by the company to the conference sponsor who in turn can use the money to reduce the conference's registration fee. Payments to defray the costs of a conference should not be accepted directly from the company by the physicians attending the conference.

- 3. No gifts should be accepted if there are strings attached. For example, physicians should not accept gifts if they are given in relation to the physician's prescribing practices.
- 4. Sponsors of CME conferences have a special responsibility to ensure that gifts are appropriate. The Accreditation Council for Continuing Medical Education has adopted a number of useful guidelines to prevent industry funding for CME conferences from leading to undue influence by the companies: (a) responsibility for and control over the selection of content, faculty, educational methods and materials should belong to the accredited sponsors of conferences, (b) presentations must give a balanced view of all therapeutic options, and (c) financial support must be acknowledged in printed announcements and brochures, but reference should not be made to specific products.¹⁷

The Task Force on Pharmaceutical Industry/CME Cooperation is currently developing an updated set of guidelines for industry funding of CME conferences.

Some of these guidelines are appropriate for smaller educational meetings and in other educational contexts, for example, when companies support meetings or lectures for medical trainees.

(Continued on page 403)

Report of the Tennessee Delegation to the American Medical Association

THOMAS K. BALLARD, M.D. Chairman

As chairman of the Tennessee delegation to the American Medical Association, I am pleased to report the activities and business conducted by the AMA House in Chicago, June 24-28, 1990 and in Orlando, Dec. 2-5, 1990. At the Annual Meeting, 436 delegates representing state medical associations, 78 delegates representing national medical specialty organizations, and 10 section and service delegates were seated. The volume of business was the heaviest in history with 295 resolutions and 110 reports introduced. A broad range of issues were considered in socioeconomics, science, ethics, and governance of the Association.

Some of the major issues considered at the Annual and Interim Meetings

Governance of the Association

The House considered two reports regarding AMA financial controls and governance. Both reports were adopted by the House.

The Reference Committee met privately with a representative of Jenner & Block, independent counsel, and expressed its appreciation for "both the openness with which information was shared and the directness of responses to its questions." The Reference Committee reported that it was satisfied that the Board's report of the investigation "accurately reflects the full report of independent counsel."

The following is a summary of recommendations of independent counsel and actions by the Board of Trustees regarding financial controls.

Background. At the 1989 Interim Meeting in Honolulu, the Board of Trustees presented Report QQ, "Strengthening the AMA—Fiscal Responsibility and Oversight," to the House of Delegates. The report provided the background concerning press reports of the reimbursement from AMA funds to former AMA Chief

Operating Officer Whalen M. Strobhar for losses incurred in his Executive Variable Benefit Plan (EVBP) money market investment during the October 1987 stock market crash, as well as an AMA loan to a former deputy executive vice-president, Richard A. Noffke, used for the purchase of a home, which loan was later taken to foreclosure by the AMA. The Board presented its findings and actions in respect to both matters. Those findings were premised upon reports to the Board by its independent legal counsel, Jenner & Block.

At the 1989 Interim Meeting, the Board directed Jenner & Block to continue its broad investigation and expand it as Jenner & Block recommended and the Board deemed necessary. The Board received additional reports from Jenner & Block and presented the additional findings of its investigation, which is complete, to the House of Delegates in Report JJJ at the 1990 Annual Meeting.

The investigation by Jenner & Block examined all the matters which were of primary concern to the Board, the House, and the membership, including: the specific transactions involving Dr. Sammons, Mr. Strobhar, Mr. Noffke, and Mr. Miller which had been the subject of press reports; all other transactions which appeared unusual or about which any suggestion of inappropriateness had been made; expenditures involving AMA's Washington residence known as the Needham House; AMA subsidiaries; real estate purchases and loans involving AMA employees; consultant contracts; pension policies and pension fund management; financial and other related management controls; the authority and accountability of senior staff; executive compensation, including perks and expense accounts; and the various processes through which the Board exercises its fiduciary responsibility and oversight role.

The investigation covered a period of time in excess of a decade, and had the full cooperation of AMA staff. Several actions were taken by the Board as the investigation progressed, and recommended changes in AMA financial policies put forward by independent counsel were adopted by the Board. The Board report adopted by the House also expressed strong disapproval of the

Excerpted from the Report of the Tennessee Delegation to the American Medical Association, submitted to the Tennessee Medical Association House of Delegates, April 11, 1991, Memphis.

extraordinary financial events which occurred, its commitment to insure no recurrence, and its regret that controls were not in place to provide it with the knowledge necessary to have prevented the events.

The recommendations and conclusions of the independent counsel and the actions of the Board of Trustees are summarized below.

Recommendations of Independent Counsel. (1) That the Board strengthen its oversight of the Association's management by establishing two new Board committees-a Compensation Committee and an Audit Committee-with broad responsibility to monitor all significant or sensitive financial transactions. (2) That all appropriate legal action be taken to obtain return of the funds disbursed to Mr. Strobhar and repayment of the note from Mr. Noffke. (3) That benefits of the AMA Pension Plan be monitored by the Board and that the Board reevaluate whether it is appropriate to offer lump sum distributions from an association pension plan. Further, that the AMA retain the asset-planning services of a benefits consulting firm to analyze the current arrangements and consider alternatives with respect to asset mix, trading strategies, and fees. (4) That AMA's employee loan policy be revised. (5) That any fees and compensation from any AMA subsidiary or AMA related source be reported to the Compensation Committee and submitted to the full Board of Trustees, and that policies at the subsidiaries similar to those standing rules and policies of the AMA requiring approvals for various contracts and financial transactions be created to the extent now in place.

Conclusions of Independent Counsel. (1) That there were a number of instances in which the executive vice-president failed to inform the Board of Trustees of financial transactions in which the executive vice-president directed that AMA funds be paid to or for the benefit of close AMA associates of the executive vice-president. (2) That, when it became aware of its lack of information, the Board acted promptly and prudently to investigate and to strengthen the financial controls of the AMA so as to prevent any activity in the future which could subject AMA to legal jeopardy or adverse publicity. (3) That controls are now in place to eliminate the likelihood of a recurrence of similar transactions.

Board Action. (1) The Board engaged Jenner & Block as independent counsel to investigate the Strobhar and Noffke transactions. (2) The Board expanded the investigation as other matters came to light. (3) The Board accepted the resignations of Mr. Strobhar and Mr. Turner and ordered legal counsel to continue to seek repayment from Mr. Strobhar and Mr. Noffke of all amounts due the AMA. (4) The Board ordered that the independent financial authority of the executive vice-president be limited to transactions under \$100,000. (5) The Board rechartered the Finance Committee to focus its attention upon prospective budgeting and the overall finances of the Association. (6) The Board established an Audit Committee to review and monitor both the internal and the independent auditing

activities of the Association. (7) The Board established a Compensation Committee to review the performance and authorize the compensation of senior staff including loans and pension payments. (8) The Board, acting through its Audit Committee, made certain that the audit plan of the independent auditors responds to the particular needs of the AMA structure and that appropriate audit controls are in place and will be subject to periodic review. (9) The Board obtained from Mr. Strobhar the return of the money paid him in connection with his stock market losses totaling, with interest, over \$417,000. A suit against Mr. Noffke was filed. (10) The Board conducted an independent review and evaluation of all consultant agreements and AMA senior staff contracts and compensation. (11) The Board selected and employed a new accounting firm. (12) The Board accepted the resignation of Dr. Sammons. (13) The Board provided the House of Delegates with the recommendations and findings of the investigation by independent counsel and made available to any delegate the actual reports of the independent counsel to the Board. (14) The Board indicated it would engage Jenner & Block to pursue any additional matters which may come to its attention which could involve significant improprieties, and if any such appear, will report further to the House of Delegates.

Delineation of Responsibilities. In a related action the House adopted a substitute resolution that called upon the AMA Board of Trustees to: evaluate the roles of its elected officers and the executive vice-president with regard to delineation of duties, functions, obligations, and responsibilities; and make available to the House of Delegates, on a yearly basis, the total compensation of its individual elected officers and the executive vice-president.

Fundamental Elements of the Patient-Physician Relationship

The House adopted the following report from the Council on Ethical and Judicial Affairs that describes six areas of fundamental rights of patients in their relationship with physicians.

Complete Text of the Report. From ancient times, physicians have recognized that the health and wellbeing of patients depends upon a collaborative effort between physician and patient. Patients share with physicians the responsibility for their own health care. The patient-physician relationship is of greatest benefit to patients when they bring medical problems to the attention of their physicians in a timely fashion, provide information about their medical condition to the best of their ability, and work with their physician in a mutually respectful alliance. Physicians can best contribute to this alliance by serving as their patients' advocate and by fostering these rights: (1) The patient has the right to receive information from physicians and to discuss the benefits, risks, and costs of appropriate treatment alternatives. Patients should receive guidance from their physician as to the optimal course of action. Patients are

also entitled to obtain copies or summaries of their medical records, to have their questions answered, to be advised of potential conflicts of interest that their physicians might have, and to receive independent professional opinions. (2) The patient has the right to make decisions regarding the health care that is recommended by his or her physician. Accordingly, patients may accept or refuse any recommended medical treatment. (3) The patient has the right to courtesy, respect, dignity, responsiveness, and timely attention to his or her needs. (4) The patient has the right to confidentiality. The physician should not reveal confidential communications or information without the consent of the patient, unless provided for by law or by the need to protect the welfare of the individual or the public interest. (5) The patient has the right to continuity of health care. The physician has an obligation to cooperate in the coordination of medically indicated care with other health care providers treating the patient. The physician may not discontinue treatment of a patient as long as further treatment is medically indicated, without giving the patient sufficient opportunity to make alternative arrangements for care. (6) The patient has a basic right to have available adequate health care. Physicians, along with the rest of society, should continue to work toward this goal. Fulfillment of this right is dependent on society providing resources so that no patient is deprived of necessary care because of an inability to pay for the care. Physicians should continue their traditional assumption of a part of the responsibility for the medical care of those who cannot afford essential health care.

Minimum Benefits in Required Employer Health Insurance

In consultation with the Council on Medical Service and the Council on Legislation, the Board of Trustees presented a basic package of benefits for the required employer insurance program which was more fully discussed in a previous report that addressed the issue of providing coverage for the uninsured.

In submitting the report the Board and Councils stated their beliefs that: (1) Enactment of any program requiring employer coverage should not create insurmountable financial obligations on small employers. (2) Most employer-provided health insurance will continue in the future to exceed substantially the minimum benefits that they are recommending. (3) The goal of the Association is to extend affordable coverage where none now exists. (4) The medical profession must be involved in the final process of determining benefits.

In a related action, the House approved the following substitute resolution: "RESOLVED, That the American Medical Association give high priority and commit all appropriate resources to provide leadership and ensure that this nation begins the process of defining in detail the basic nationwide standards for a uniform, minimum yet adequate health care benefits package for the unemployed uninsured."

Medicare RBRVS Payment System

The House considered four resolutions regarding the new Medicare physician payment system that addressed issues of geographic disparity and other economic considerations.

The House adopted a lengthy substitute resolution that calls on the AMA to: (1) give continued highest priority to elimination of geographic variations in Medicare payment that do not reflect demonstrable variations in practice overhead or professional liability costs; (2) continue to support and work to establish in the 1990 Budget Reconciliation Act a floor on the 1991 Medicare payments for physician services at 80% of the national average prevailing charge; (3) work vigorously through appropriate channels (e.g., Congress, HCFA, and the PPRC) to ensure that the RBRVS-based Medicare payment system be implemented in a manner that reflects appropriate economic considerations; (4) work to ensure that the most current valid and reliable data are collected and applied in calculating accurate geographic practice cost indices (GPCIs) and in determining geographic payment areas for use in the new Medicare physician payment system, with data collected from rural practice sites for this purpose; (5) evaluate the adequacy and consistency with AMA policy of the GPCIs and their underlying data and methodology, with an interim report at the 1990 Interim Meeting of the House and a full report at the 1991 Annual Meeting; and (6) take the necessary regulatory and legislative steps to ensure that geographic payment variation be limited to demonstrable variations in practice costs as specified in the OBRA 1989 payment reform legislation, that equitable access to medical care not be diminished in any area as a result of any particular GPCI data or methodology, and that payment for any service be not less than 80% of the median of the national payment schedule amount for that service.

Health Access America

The House filed an information report describing the status of Health Access America, which integrates AMA policies into one cohesive approach to build on the strengths of the U.S. health care system and address its significant weaknesses.

The report outlined: (1) several categories of medical care expenditures over which physicians have little or no control; (2) additional issues which contribute to medical care expenditures, e.g., increased aging of the American population, new medical technologies, federal/state regulations, poverty, alcohol and drug abuse, and violence; and (3) AMA efforts to educate the public.

The House also called upon the AMA to: (1) encourage all county, state, and specialty societies to endorse and support the elements of the AMA Health Access America program, and that such efforts should involve the active promotion and dissemination of this program at the local grassroots level; (2) be sensitive to the needs of small businesses, the self-employed, and

rural citizens as they develop more specific proposals in the Health Access America Plan; (3) begin immediately to seek comprehensive reforms to reduce the administrative inefficiencies, burdens, and expenses involved in paying for health care services; and (4) urge that proposals to increase access to health care also address the need to reduce administrative costs and burdens.

Regulation of Physician Office Laboratories

The House adopted a Board report informing the House about proposed regulations published by HCFA to implement the laboratory certification program established in 1988. The report stated that it is the AMA Board's intention for AMA comments on these proposed regulations to call for regulations that are reasonable, based on scientific data, and responsive to the goals of improving access to quality services for patients.

In a related action, the House adopted a substitute resolution that in part called upon the AMA to: protest the reported high costs being considered for certification of laboratories and the limited number of laboratory categories proposed; and protest the very limited list of waivered tests.

RU-486 Availability

Three resolutions pertaining to RU-486 (mifepristone) were considered by the House. The delegates adopted a policy asking the AMA to support legal availability of RU-486 for appropriate research and, if indicated, clinical practice.

Animals in Biomedical Research

The House heard much discussion on the appropriate use of animals in biomedical research and the effect of animal activist groups on research.

The delegates approved a policy that called upon the AMA to: (1) communicate its strong support of the appropriate and humane use of animals in research and commend HHS Secretary Sullivan for his public support of such research that benefits the health and wellbeing of humans and animals; (2) encourage its members to make every effort to inform their patients, community groups, legislators, and the media that, while the use of non-animal models in research is desirable when possible, the continued use of animals is critical for the development of new and more effective medical treatments of disease for both humans and animals; (3) provide reasonable and appropriate assistance to researchers whose projects have been hampered by animal activist groups; and (4) establish a repository of information concerning such research delays and provide an evaluation of the impact of these delays to the AMA members and the public.

Opposition to Therapeutic Substitution

Hearing substantial opposition to therapeutic substitution, the delegates approved a policy calling on the AMA to: (1) oppose the establishment of a system at the federal or state level premised on therapeutic inter-

changeability of outpatient prescription drugs and formularies, since it will inevitably interfere with the ability of the patient's physician to assure that the medication prescribed is dispensed to the patient; (2) encourage and assist all states in passing legislation prohibiting the practice of therapeutic substitution; and (3) provide education to physicians and the general public that therapeutic substitution is not equal to generic substitution and provide information about the potential dangers of therapeutic substitution.

National Practitioner Data Bank

At the Annual Meeting, the House received a report that summarized the background on the development of the National Practitioner Data Bank (Data Bank) and described AMA efforts to communicate information concerning the Data Bank to physicians.

Outlining the AMA's high priority legislative and regulatory activities, the Board stated that it will continue to pursue outstanding issues and inform the House of Delegates of key developments.

The House also approved policy asking the AMA to: request that the Department of Health and Human Services (HHS) instruct the Data Bank to institute physician notification of adverse Data Bank entries with verification of receipt by the physician; and notify its members of the AMA resources to assist individual physicians having difficulties with the Data Bank.

At the Interim Meeting, the House received six resolutions about problems associated with the Data Bank. The Reference Committee formulated a substitute resolution which was adopted along with a resolution submitted by the Hospital Medical Staff Section.

The delegates voted to ask the AMA to: (1) continue to work with HHS to ensure that the Data Bank does not collect nor release information regarding the denial of specific clinical privileges based solely on failure to meet hospital established minimal criteria (i.e., level of professional liability coverage, board certification), not related to a physician's competence or professional conduct; (2) continue to work with HHS to revise the current Data Bank dispute process to accelerate a physician's opportunity to attach an explanation or statement to a disputed report; (3) work with HHS to establish an appropriate response time for hospital inquiries to the Data Bank; (4) work with HHS to establish a mechanism to inform physicians when an inquiry to the Data Bank has been made; (5) reaffirm its policy that reports, other than licensure revocation, in the Data Bank should be purged after five years; (6) support efforts to require the same Data Bank reporting requirements for physicians, dentists, and other licensed health care practitioners; (7) reaffirm its policy and use all necessary efforts to direct the Data Bank to send all notifications to physicians by certified mail return receipt requested; and (8) use all necessary efforts at the federal level to direct the Data Bank to begin the 60 day appeal process from the date the physician receives notification.

AMA Budget, Fiscal 1991

The Board of Trustees presented the 1991 Plan and Budget calling for: \$189.8 million in operating revenues; \$186.0 million in operating expenses; budgeted income taxes and non-operating expenses of \$1.7 million and \$2.0 million, respectively, leaving the Association with a *bottom line of \$136,000*; and *no* dues increase in 1991.

The report also highlights the four areas of major focus for 1991: professionalism/standard setting; physician autonomy; health of the public; and support and service activity.

Gifts to Physicians from Industry

The AMA Council on Ethical and Judicial Affairs submitted its opinion related to gifts to physicians from industry and provided guidelines to physicians to avoid the acceptance of inappropriate gifts. In a related report on the Council's opinion, the Council discussed the ethical issues raised by the practice of industry gift giving including: influence on physician practices; appearance of impropriety; and costs of gifts. Copies of these reports may be obtained by writing to Council on Ethical and Judicial Affairs, AMA Headquarters.

Physician Participation in State Executions

Prompted by reports of physician involvement in an execution by lethal injection in Illinois, the House adopted a resolution that: reaffirmed AMA's ethical position in opposition to physician participation in legally authorized executions; and would inform state medical licensing boards and certification agencies that physician participation in lethal injection executions is a serious ethical violation.

HHS Inspector General

The delegates heard vehement and unanimous testimony reciting the numerous inappropriate and questionable activities of the Office of Inspector General of HHS, and in support of the AMA's efforts to gain the removal of Mr. Kusserow from the position.

The House adopted a resolution calling on the AMA to: continue its actions to seek the immediate resignation or dismissal of Richard Kusserow as inspector general; and encourage state, specialty, auxiliary organizations, and individual physicians to write President George Bush, Dr. Louis Sullivan, and members of Congress in an effort to effect Mr. Kusserow's ouster.

COBRA Patient Transfer Provisions

The law setting out penalties for inappropriate patient transfers received considerable attention that demonstrated a real need to continue AMA activities to press for appropriate changes in how the law is written and how the courts interpret the law, especially as it relates to malpractice cases.

The House adopted a resolution calling on the AMA to: seek legal or legislative opportunities to clarify that

this law applies only to inappropriate transfers from hospital emergency departments and not to issues of malpractice; and seek appropriate modifications of the law to preclude liability for discharges from the hospital, including the emergency department and outpatient facility.

Physicians Called to Military Service

Two resolutions dealt with some problems encountered by reserve physicians who have been called to active military service. One called upon the AMA to seek appropriate amendments to the "Soldiers and Sailors Relief Act," in order to provide adequate professional liability protection for physicians called to active military duty. The other asked the AMA to work to assure equality of military pay between active military personnel and members of the National Guard and Military Reserve who are called to active duty.

Reimbursement for EKG Interpretation

OBRA 1990, which was recently signed into law, contains provisions eliminating separate Medicare payment for EKG interpretation. The House agreed to accept an emergency resolution on this issue and took action calling on the AMA to: establish a high priority to effect repeal of those provisions included in the law that eliminate Medicare payment in 1992 and beyond for routine reading of EKGs, where the EKG is performed and payment is made to a physician as part of a visit or consultation.

Drug Abuse

The House adopted a resolution encouraging every physician to make a commitment to join his/her community in attempting to eliminate drug abuse by the year 2000.

That said commitment should encourage involvement in at least one of the following roles: (1) Donation of money to any drug abuse prevention program. (2) Donation of time to talk to local civic groups, schools, religious institutions, and other appropriate groups about drug abuse. (3) Join or organize local groups dedicated to drug abuse prevention. (4) Talk to youth groups about brain damage and other deleterious effects of drug abuse. (5) Educate and support legislators, office-holders, and local leaders toward ending the drug abuse crisis.

Rural Physician Shortage

The House approved a thorough and detailed report by the Council on Medical Education that addresses the complex problems of providing health care services and the shortage of physicians in rural areas.

The report presented the following recommendations calling on the AMA to: (1) encourage medical schools and residency programs to develop educationally sound rural clinical preceptorships and rotations consistent with educational and training requirements, and to pro-

vide early and continuing exposure to those programs for medical students and residents; (2) encourage medical schools to develop educationally sound primary care residences in smaller communities with the goal of educating and recruiting more rural physicians; (3) encourage state and county medical societies to support state legislative efforts toward developing scholarship and loan programs for future rural physicians; (4) encourage state and county medical societies and local medical schools to develop outreach and recruitment programs in rural counties to attract promising high school and college students to medicine and the other health professions; (5) urge continued federal and state legislative support for funding of Area Health Education Centers (AHECs) for rural and other underserved areas; (6) continue to support full appropriation for the National Health Services Corps Scholarship Program, with the proviso that medical schools serving states with large rural underserved populations have a priority and significant voice in the selection of recipients for those scholarships; (7) support full funding of the new federal National Health Service Corps loan repayment program; (8) encourage continued legislative support of the research studies being conducted by the Rural Health Research Centers funded by the National Office of Rural Health in the Department of Health and Human Services; (9) continue its research investigation into the impact of educational programs on the supply of rural physicians; (10) continue to conduct research and monitor other progress in development of educational strategies for alleviating rural physician shortages; (11) reaffirm its support for legislation making interest payments on student debt tax-deductible; and (12) encourage state and county medical societies to develop programs to enhance work opportunities and social support systems for spouses of rural practitioners.

Residency/Fellowship Working Hours and Supervision

The House approved a substitute resolution asking the AMA to: continue to work with the Accreditation Council for Graduate Medical Education to implement AMA policy for residency work hours reform; and use existing policy as a guideline in working with state medical societies to obtain modification, if needed, of pending future legislation on total residency work hours, conditions, and supervision.

PRO Notification of Quality Problems

The Council on Medical Service submitted a report that discusses the PRO Quality Intervention Plan (QIP) and the procedures for PRO notification of quality problems. The Council submitted recommendations that were adopted after modification by the House of Delegates.

The delegates voted to ask the AMA to: (1) urge the Health Care Financing Administration (HCFA) to modify regulations so that (a) in regard to confirmed quality problems which have been finally adjudicated

by the PRO Quality Assurance Committee, the PRO is required to notify both the physician and president of the hospital medical staff in all such cases, and (b) the PRO be required to implement a mechanism to verify receipt of the PRO's notice of both potential and confirmed quality problems by the physician; (2) seek an amendment to the PRO law to require that when the PRO review goes beyond the generic screen for review, the physician must be notified within 48 hours of the exact reason for said review; and (3) seek an amendment to the PRO law to repeal the existing prohibition on the release to a PRO proposed sanctioned physician of documents or other information produced by a PRO in connection with its deliberation in making quality determinations.

In a related action, the House considered a Joint Report of the Council on Medical Service and the Council on Medical Education that examined the implications of HCFA's guidelines that call for PRO review and sanctions of physicians in training. In addition, four resolutions on the issue were submitted.

The House adopted as amended the following recommendations of the two Councils: (1) The attending of record not be assigned QIP points when the PRO in its final determination and after consultation with the program director has clearly identified the resident in an accredited training program as the source of the problem. (2) The AMA shall urge HCFA to require PROs to notify the responsible training program and resident in an accredited training program as to the quality problem in patient care in instances where a resident is deemed by a PRO to be responsible for the problem. (3) When a resident is deemed by the PRO in its final determination to be responsible for the problem, the resident and the program director should receive corrective notification which serves to initiate a specific educational corrective action plan by the residency program director for the resident to complete. (4) When a resident in an accredited training program is deemed by a PRO to be responsible for the problem, the AMA urges the provider's training program to (a) develop a corrective action plan regarding how it plans to address problems identified under the QIP; and (b) to make the CAP available to the PRO and the accrediting body at the accreditation visit. (5) While participating in an accredited training program, residents shall not be assigned any QIP points for activities within their training programs. However, medical activities outside of their training programs may be subject to QIP points. (6) Corrective notifications by PROs to residents shall be used only within the training programs and shall remain confidential from all other parties. (7) The AMA shall seek any necessary legislative and regulatory changes in the Medicare program to implement these recommendations. (8) The AMA shall expand its educational program for physicians on peer review and the QIP program to include residents and medical students. (9) The AMA shall study the impact of HCFA QIP regulations upon graduate medical education.

AIDS as a Communicable and a Sexually Transmitted Disease

Although there still is no cure, medical science has developed treatment options which can delay the conversion of a patient from being seropositive for HIV infection to a patient dying from an AIDS-related disease.

With the knowledge that early detection of HIV infection is even more imperative than before, the House of Delegates adopted as amended a resolution supporting "the classification of HIV (AIDS) as a communicable and a Sexually Transmitted Disease (STD) and the control measures attendant to its classification."

The House has asked the Board of Trustees to prepare a report for the House on the question of HIV testing.

Conclusion

The meetings of the AMA House are conducted in a most democratic manner. They provide those who attend a unique educational experience as a wealth of information is disseminated and discussed. I would encourage you to attend and participate. Any member of the Association may present testimony at the Reference Committee and, of course, corridor discussions on the issues provide additional opportunities to get your views across.

If you can't come to the meeting you can still be represented through your delegation. Let your delegation know your opinions. Individual AMA members can also prepare a resolution and request that it be submitted to the House. Many AMA policies began with an individual physician who had a good idea and coaxed it through the democratic process.

It was my privilege to serve as delegation chairman during 1990. Dr. Hamel B. Eason was elected by our delegates and alternates to serve as chairman during 1991 and will deliver this report to you next year at this

TMA Delegates and Alternate Delegates to AMA

Delegates

Charles Edward Allen, M.D., Johnson City Thomas K. Ballard, M.D., Chairman, Jackson John S. Derryberry, M.D., Shelbyville Hamel B. Eason, M.D., Memphis Allen S. Edmonson, M.D., Memphis William O. Miller, M.D., Knoxville John B. Thomison, M.D., Nashville George A. Zirkle Jr., M.D., Knoxville Paul D. Parsons, M.D. (YPS), Franklin

Alternate Delegates

Robert E. Bowers, M.D., Chattanooga Hugh Francis Jr., M.D., Memphis Francis W. Gluck Jr., M.D., Nashville Nat E. Hyder Jr., M.D., Johnson City Thurman L. Pedigo, M.D., McMinnville James R. Royal, M.D., Chattanooga Clarence R. Sanders, M.D., Gallatin A. Roy Tyrer Jr., M.D., Memphis David J. Donahue, M.D., (YPS), Memphis

Gifts to Physicians From Industry . . .

(Continued from page 396)

5. Financial support for conferences should be disclosed publicly. Physicians will be able to evaluate the information presented to them more appropriately if they are aware that companies have contributed funds to defray the costs of the presentation.

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Real Doctors Can Piss in the Sink

CLARENCE E. GOULDING JR., M.D.

Many years ago, before our new Medical Center Hospital was built, the surgery suite in the existing hospital had been expanded to six operating rooms to accommodate an ever-increasing number of staff members. Through all the expansions and remodelings, however, the bathroom in the surgical doctor's lounge remained a "one-holer," and frequently there was a wait to use it.

There was, at that time, one staff member who was unwilling to "take a number" or wait his turn. He would use the basin to relieve his bladder distention, remarking after he had done so that "Real doctors can piss in the sink." Since we had only one "sink," the rest of us had thus to wash in the same receptacle in which he chose to urinate. Our chief of surgery finally had a urinal painted red, put the doctor's name on it, and hung it on a hook beside the basin.

It was this vignette from our local medical past that came to mind one morning a week or so ago as I arrived at the hospital. When I was coming from the parking lot, I noted a group of five white-coated individuals emerge from a door marked "Emergency Exit Only." They practically tripped over one sign reading "Keep Off Grass" and detoured around a second sign carrying the same admonition as they reached the sidewalk.

As I passed them on the steps, I commented, good naturedly, that this was one of the largest groups of illiterate physicians I had ever encountered. "Could you not read the signs over which you tripped?" I asked. To which the leader of the pack replied, "I can read fine" and the others chuckled. Now, the respondent was not just the front-runner of this entourage; he was, in fact, the senior ranking person in the group. And it was then that I recalled that "Real doctors can piss in the sink."

Is this not a part of our profession's problem today? Yes, physicians still rank above attorneys, car salesmen, politicians, and many others in the public's confidence and esteem; but we, too, have lost ground over the preceding decades.

The public still looks to the physician for more than medical care. I realize that our expertise in the medical area does not endow us with wisdom in all areas, but the characteristics of our profession are purported to include prudence, concern, compassion, ethics, honesty, and good sense.

If we choose to ignore the signs, if we do not set the

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example, if we disregard the accepted procedures that others are expected to follow, we send the wrong message. This message may result in resentment from the observer, a loss of the confidence and trust afforded us by our fellow citizens, or the perception that we live by a different set of rules from those laid down for the populace.

If, in fact, physicians are by nature an egregious group (i.e., set apart from the herd), then that setting apart should call forth dedication to high attributes, not the flaunting of irresponsible privilege.

The area over which these young physicians had opted to trespass had, in the past year, been packed hard by the feet of many, leaving a brown, ugly path in an otherwise beautifully landscaped area of our hospital grounds. This area had been reworked and replanted in the early spring. Grass is beginning to grow there. Nature and the earth can be very resilient. But, to help mother nature, the signs were strategically placed in our way.

Now, I am not a "Greenpeace" fanatic, nor am I alluding to this singular incident when I borrow these words from the prophet. I am certain that Ezekiel was addressing deeper concerns when he penned this metaphor, even though it is an appropriate thought in its literal sense as well:

Is it not enough for you to feed on the good pasture, that you must tread down the rest with your feet; and to drink of the clear water, that you must foul the rest with your feet?

And must the rest [of us] eat what you have trodden and drink what you have fouled?

We have a stewardship in medicine, and should maintain an image that conveys a commitment to that stewardship.

One of my favorite poets is Edgar A. Guest. Among his poems one will find "Sermons We See." It goes something like this:

I'd rather see a sermon than hear one any day; I'd rather one should walk with me than merely tell the way. The eye's a better pupil and more willing than the ear, Fine counsel is confusing, but example's always clear; And the best of all the preachers are the men who live their creeds, For to see good put in action is what everybody needs.

I soon can learn to do it if you'll let me see it done; I can watch your hands in action, but your tongue too fast may run. And the lecture you deliver may be very wise and true, But I'd rather get my lessons by observing what you do; For I might misunderstand you and the high advice you give, But there's no misunderstanding how you act and how you live.

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prezident's page



HOWARD L. SALYER

Two TMA Programs Set Example For Rest of Nation

As members of the Tennessee Medical Association, we can be proud of many accomplishments, but we can be especially proud of two important achievements—the Impaired Physician Program and the State Volunteer Mutual Insurance Company (SVMIC). Extremely successful in Tennessee, both of these programs have become national leaders and are used as models by other states who want to develop similar programs.

The Impaired Physician Peer Review Committee was mandated in 1978, and to date, more than 600 physicians have participated in this innovative program. A great deal of credit for this success must be given to Charles Thorne, M.D. and his committee, and especially to David Dodd, M.D., who as medical director of the Impaired Physician Program has the responsibility for helping the impaired physicians, getting them into a treatment program, following them through aftercare, and getting these individuals back into practice.

Secondly, SVMIC, which was founded in 1976, is currently rated as the number one state-owned insurance company in the United States, and has an A+ superior rating. The success of this program is due to the many people who served on the Risk Identification Committee and the Loss Prevention Committee, and in particular to William Edwards, M.D. and Allen Edmonson, M.D. These two individuals devoted countless hours to the development and implementation of this program, and I extend my heartfelt thanks to them. In addition, I want to recognize the members of the TMA for their monetary support of this program through the purchase of insurance. Their support has made SVMIC truly outstanding, and they are to be praised for their efforts.

Hal h Salyer 4.D.

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AUGUST, 1991

editorials

Safety First

Daddy's due home any minute, Punkin, and I'm outa Columbian coffee. Damn! ... Gotta get some! (Jump in car, dump baby in car seat ... Off to grocery ... Get coffee ... Jump back in car ... Head home).... Hallelujah! Just in time. There's Daddy now.... Hello, dear. Bad day at the office? ... No,

things about as usual here. Nothing to report. Just no coffee. Running a little late. . . . Seat belt? Oh, that. Like I said, running a little late. Just not time. Happens all the time. . . . Sure, *she* was in *her* car seat. . . . Don't worry about it. Nothin's gonna happen.

Like she said, happens all the time. If you don't believe it, look at the stats in the paper by Olive carried elsewhere in this issue of the *Journal*. He has an admittedly small sample, but he found 64% of the subjects in his small survey were not wearing seat belts while traveling at high speed out on the interstate; I suspect that in any case a larger sample would yield results just as discouraging.

Dr. Olive's message is that doctors can and should play a major role in getting this—and therefore the law's—message across to their (your) patients. After all, wearing a seat belt is the law in Tennessee and most other states. I'm not going to say any more about Dr. Olive's paper, as he has gotten his own message across loud and clear. Incidentally, do you wear *your* seat belt, Doctor? Accidents do happen, Mama's assurances to the contrary notwithstanding—and they happen on the way to the grocery; they do all the time.

In our "Mailbox" this month is another missive, a rather scathing letter in reply to an editorial that our correspondent considered scathing, and furthermore aimed at him. His letter gave me no reason to change a word of my editorial, and I don't intend, therefore, to play any semantic games with him, though he might, not without justification, maintain that I started it. If you wish to try and figure out his extremely complex and convoluted paragraphs on definitions, be my guest. By comparison, what I said in my editorial was relatively simple, and also, he contends, wrong. He is entitled to his opinion, and furthermore is entitled to have his remarks published here. And so they are.

Having said that, I must go on to add that, believe it or not, Mr. Bolton, our correspondent, and I are in essential agreement in our aims, which is something I also pointed out in my editorial. Our quarrel is just about methods. I maintained, and shall continue to maintain, that monkeying around with the language is the wrong way to go about it—or anything else, for that matter.

It's not Daddy or Mama and their safety, but Punkin and hers I worry about, though. Mr. Bolton and his group perceive, correctly, I think, that you have to catch 'em while they're young. Mama plops Punkin in her car seat, so Punkin learns a good habit there. But what else does she learn from Mama, and from the rest of the 64% of the motorists observed by Dr. Olive? "... Oh, that. Nothin's gonna happen." But sooner or later it does, and maybe to Punkin.

Accidents are random misadventures; if they were inevitable, they would not be accidents, but deliberate acts by a higher malevolent power, such as Kismet or the Devil, say. Since such misadventures are random occurrences, the risks can be minimized by taking precautions calculated to do just that, such as, for example, wearing seat belts in automobiles. In addition to minimizing such risks, refraining from smoking, eating a proper diet, getting proper exercise, and any number of other things I'm sure you could name, all involve what Mr. Bolton advocates, as you and I should, as well, which is assumption by the individual of a greater responsibility for his own health. On the other hand, there are also imponderables, over which the individual has no control, that can and often do play a part in such misadventures; some of those are vagaries of nature, the precipitate or deliberate violent actions of others, and failure of equipment, the last of which becomes increasingly important as technology progresses. The only protection one has against an airplane crash, for example, is not to fly.

That one cannot protect oneself against every adversity, though, does not relieve one of the responsibility of protecting oneself against those things that might be preventable, such as serious injury or death. Nor is the individual's responsibility to himself alone, as opponents of seat belt legislation have argued; it is also to society generally, since it is now society that must bear a major portion of the financial burden of any injury, not to mention the emotional burden imposed on family and friends. Since this is so, it is also society's responsibility to see that the individual recognize and exercise his own share of it.

It has been shown repeatedly, through many surveys, that despite any apparent erosion of medicine's image, patients individually, as well as the public generally, do listen carefully to their own doctors, and even often pay attention to what they say, where matters of their own health are concerned. What do you suppose, then, they will learn from you, Doctor, despite any formal protestations or proclamations you might make, when they see Your Obesityness driving down the road with your seat belt unfastened and a cigarette in your hand? (Of course, this is a theoretical illustration that could not possibly apply to any of our readers. . . . It couldn't, could it?)

The Magic of the Flute

George Bernard Shaw, who was not particularly noted for his reverence, once commented that Sarestro's aria "In Diesen Heil'gen Hallen" in Mozart's opera Die Zauberfloete was the only song he knew of that man could put into the mouth of God without being sacrilegious. The opera, concocted at the behest of a Viennese impresario as a light piece of public entertainment, was written while Mozart was already dying. It was first heard by the public in Vienna just short of 200 years ago, on September 30, 1791, less than three months before Mozart's death. Mozart's sure sense of the comic was never more in evidence than in the characters of Papageno and Papagena, with their tuneful, folkish songs, as befits a work commissioned as light comedy. Despite that, Mozart, again in character, raised the work itself into the realm of the sublime through the arias of Prince Tamino and Pamina, daughter of the Oueen of the Night by Sarestro, high priest of Isis and Osiris. In his aria, one of Mozart's most glorious, Sarestro proclaims that in these hallowed halls there is no room for hate or vengeance. Hence Shaw's comment.

When I was growing up and learning about music, Mozart was scarcely mentioned as a composer of note, at least not in my hearing. I heard his music referred to as thin and effete. My music appreciation teachers, and I think the public at large, preferred the full-bodied music of the later classical and romantic composers. At the same time, not much of Mozart's music had been very widely heard by then. Recording was still in its early childhood; vinyl had not been invented, and a symphony recording consisted of an expensive album of three to five thick 12-inch disks. Even though the great orchestras could on occasion be heard on the radio, the number of works that could make it over the airwaves was limited. Mozart did not compete well for air time, despite the championing of his music by many noted artists.

I am a fickle listener, and my favorite composer has always tended to be whichever one of a dozen or so I happened to be listening to at the moment or recalling with pleasure. Though it would pain me deeply to be deprived of the works of any of them, or of individual compositions of countless others, for that matter, on the occasions when I have given it any thought I have concluded that if I could have the music of only one composer, I would without hesitation choose Mozart. Mozart is the complete composer. His output was prodigious and protean. He could do anything, and he did it all almost beyond compare. I did not start out thinking that. It is a con-

J.B.T.

clusion that has come about stealthily with increasing exposure to his compositions over more than half a century.

In commemoration of the composer's death 200 years ago come December 5 next, 1991 has been designated Mozart's year. His operas have gained mightily in popularity in the past decade or so—and no wonder—and all of the better known ones will be aired frequently; most of them can also be seen on television at least once, and in some cases, such as Don Giovanni, several times. Don Giovanni has been called the perfect opera. Being only an opera lover and not an expert, and therefore not knowing what a perfect opera is, or what it might be that would make one perfect, I really have nothing to say about that one way or another, except to observe that if there is indeed any such animal, Don Giovanni is a not unworthy candidate.

I always thought, myself, that the magic was in the Flute—and not just the flute's magic, either; it's Mozart's magic that renders the Flute magic for its audience. The same magic is in Mozart's other operas, too. At the same time, there are, as you may have found out, a couple of problems with operas. One problem is that there is too often a lot of slack time between tunes. (Aria is just a fancy word for tune. Aria is not a fancy word in Italian; it means tune.) If one is not careful, one might go to sleep between them, particularly if there is nothing going on-and if there is nothing better to watch than the back of your eyelids, very little is going on. Of course, one might go to sleep during the arias, too, and there are those who would consider that a blessing. During some operas I might myself, and I love opera; but not during any of Mozart's. There is always a lot going on in Mozart's operas, even when you can't see it, and the tunes are not very far apart; they are always worth staying awake for, too.

The other problem with opera is that in opera the words are integral to the action, or if they aren't they should be. The words, though, are generally something other than English, and if they aren't they should be if that's the way they were written. In my experience, though singing opera in translation may not be a disaster, it's close. For one thing, the translation may bear only a passing resemblance to the original, which, as in voice dubbing, is a necessary evil to make it come out right. I thought captions would be an intrusion on everything—music, picture, attention, and mood. Having seen it in action, I have changed my mind; I think it's the greatest thing since sliced bread. So, apparently, do a lot of other people, particularly ones who love music but could never

stand opera. Telecasts of captioned operas have proved very popular, and I understand popular among some viewers one would not expect—among some viewers that opera lovers, producers, and so on, I'll bet *did* not expect—opera to be popular among.

You have to be committed to it to watch a production of *Don Giovanni*; it's long, and once you have found out that through captions you can find out what's going on, you also find out you can't watch it off and on. What's going on is a lot, and take your eyes off the tube for any length of time and you might—no, will—miss something. Maybe something critical. One of the things you might have missed in one production of *Don Giovanni*, for instance, is one of Kathleen Battle's delightful arias. Miss Battle is not only one of everybody's favorite singers of Mozart, but Miss Battle is also a very fetching songbird, and that is another reason for sticking around. There are more.

Mozart was a child prodigy, and there were those who maintained he was still a child when he tragically died at the early age of 35 years. Those who thought that were mostly Antonio Solieri, Mozart's arch-rival and critic, and some of Solieri's hangerson. That, along with playwright avarice, doubtless had to do with the tasteless and more or less inaccurate portrayal of Mozart as a buffoon in the play Amadeus. Though that portrayal did Mozart a disservice, it made a better story that way, so who cared? What else it likely did was to serve the useful purpose of bringing Mozart's incomparable music before a vaster and much more varied audience, and it might even have been responsible for the breadth of this year's celebration. Certainly, the 1956 bicentennial of Mozart's birth, though acknowledged, was much less of a fete.

Buffoon or not, Mozart was indeed a prankster, and he mixed into his sublimest operas earthy, even sometimes coarse, humor. Some of his earthiest, even sometimes his coarsest, humor he set to some of his sublimest music. But if you don't speak the language, or somebody who does speak it doesn't tell you, you'll never know. Opera generally being considered family entertainment (though considering their plots I can't imagine why—like the Bible, Shakespeare, and Grimm's fairy tales), most of Mozart's more bawdy humor does not make it into the captions. When the captions cease for a spell during the singing, now you'll know why. Pity.

Mozart's popularity among music lovers generally, as well as opera lovers, continues expanding. His operas have been called the oldest and at the same time the freshest in all the modern repertory. Their

appeal shows no signs of abating. I hope it never does; I predict it never will. But then where tastes are concerned one can never tell.

J.B.T.



Accidents Will Happen

To the Editor:

I am familiar with several state medical journals and have typically regarded yours as one of the best, primarily because it has provided useful information for practitioners. However, a recent editorial you published has caused me to reassess this judgement. "Accidents Will Happen" (*J Tenn Med Assoc* 84:140-141, March 1991) was a blistering editorial that was unnecessary and, at least, partially inaccurate. You completely overlooked tne importance of using the word "accident" in a clinical setting, choosing instead to take an ivory tower approach of hiding behind the second definition of the word as it appears in the dictionary.

If you are truly concerned about precision and completeness when using our language, which are two of the main points of your editorial, then I must ask that you be held to the same standards you expect of other contributors to your Journal. My basic concern in this regard is the incomplete definition of "accident" you reproduced in the editorial. Two senses of the word accident are reproduced in the Journal. The publishers of Webster's Dictionaries state that "Information coming between the entry word and the first definition of a multisense word applies to all senses and subsenses." A piece of information that appears in the dictionary between the word "accident" and the first definition you cited is the word "chance"—a characterization of all senses and subsenses of the word accident. It is this characterization (i.e. chance) that is incorrect when one considers the epidemiology of injuries.

To further examine your argument, I would like to assess your defense. Dictionaries cite the sense known to have been first used in English as the first entry of a definition. You, wisely, appear not to have taken issue with the fact that injuries are not accidents based on sense 1a (i.e. "An event or condition occurring by chance or arising from unknown or remote causes"). Your argument then focuses on sense 2a, a newer and less common definition of the word accident. Injuries disproportionately impact certain populations. After much research, it has been demonstrated that the uneducated or undereducated are at high risk for many types of injury. More than one million adult Tennesseans have less than a high school education, over 500,000 have less than an eighth grade education, and more than 200,000 adults have less than a fourth grade education.

Thus, while you have the luxury of retreating to a dictionary in the interest of being "precise," those at greatest risk for injury may not even be able to read a dictionary. They, instead, will rely upon whatever definition (whether it be a denotation or connotation) of "accident" they have stored in their minds. Most likely, their definition will more closely match the most common use of the word, i.e. sense 1a. If physicians and other health care professionals reinforce that by referring to injuries as accidents thereby implying that they occur by chance, then we are contributing to the misperception that injuries are not preventable. Instead, shouldn't we be empowering our clients to help themselves?

Finally, you seem to be disturbed that the English language is not static, "more's the pity." I still think that words mean what the dictionary says they mean, but I also realize that the dictionary is a dynamic document that strives to keep up with the evolution of the English language. Go to your local library and compare today's dictionary with one from the 1960s. Our language changes every day. In regard to injuries not being referred to as accidents, the change is more than semantic. We are trying to encourage individuals to take responsibility for their own actions. By proclaiming that "accident" and "injury" are not synonymous, we remove one of the attitudinal barriers that impedes our progress toward reducing the number of deaths and disabilities resulting from injuries. If you consider that "whimsy," so be it.

Allen Bolton Asst. Professor of Medicine Injury Prevention Research Center Univ. of Alabama at Birmingham UAB Station Birmingham, AL 37294

Reply: I stand by my editorial comment—Editor.



Sidney Wainwright Ballard, age 93. Died May 29, 1991. Graduate of Northwestern University School of Medicine. Member of Nashville Academy of Medicine.

John M. Boylin, age 82. Died June 1, 1991. Graduate of University of Tennessee College of Medicine. Member of Nashville Academy of Medicine.

Leon Cuno Hoskins, age 80. Died May 23, 1991. Graduate of Vanderbilt University School of Medicine. Member of Knoxville Academy of Medicine.

Walter H. Stephenson, age 69. Died June 13, 1991. Graduate of University of Tennessee College of Medicine. Member of Sumner County Medical Society.

new members

The Journal takes this opportunity to welcome these new members to the Tennessee Medical Association.

BLOUNT COUNTY MEDICAL SOCIETY Patrick Lee Morgan, M.D., Maryville

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

Antonio Aguirre, M.D., Jackson James Allen Payne, M.D., Jackson Lisa Marie Williams, M.D., Jackson

GREENE COUNTY MEDICAL SOCIETY

Timothy Sullivan, M.D., Greeneville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Lisa Marie Myers, M.D., Memphis

(Student)

Anthony C. Moretta, Memphis

WASHINGTON-UNICOI-JOHNSON COUNTY MEDICAL ASSOCIATION

William T. Williams, M.D., Jonesborough

personal news

John S. Derryberry, M.D., Shelbyville, the first Bedford County United Way board chair, has received the prestigious Dr. Henry Feldhaus, Jr., Medical Service Award from the Bedford County Chamber of Commerce.

David G. Stanley, M.D., Oak Ridge, has been chosen president-elect of the International College of Surgeons, United States chapter.

AMA Physician's Recognition Award The following TMA members qualified for the

TMA Members Receive

The following TMA members qualified for the AMA Physician's Recognition Award during May 1991. This list, supplied by the AMA, does not include members who reside in other states.

Physicians can receive the PRA certificate valid for one, two, or three years. For the one-year award, physicians report 50 hours of continuing medical education, including 20 hours of Category 1; for the two-year award, physicians report 100 hours of CME, including 40 hours of Category 1; for the three-year award, physicians report 150 hours of CME, 60 of which are Category 1.

W. Corbet Curfman, M.D., Knoxville Robert J. Doell, M.D., Kingsport Theodore A. Feintuch, M.D., Chattanooga Stephen S. Feman, M.D., Nashville Roland W. Gray, M.D., Nashville Warren G. Hayes, M.D., Springfield Douglas B. Haynes, M.D., McMinnville Michael T. Hood, M.D., Newport Robert W. Ikard, M.D., Nashville Howard S. Kirshner, M.D., Nashville Herbert J. Michaels, M.D., Kingsport Kenneth T. Miller Jr., M.D., Oak Ridge Luis C. Pannocchia, M.D., New Tazewell James D. Panzer, M.D., Cookeville Thurman L. Pedigo, M.D., McMinnville Marek M. Pienkowski, M.D., Knoxville Virginia A. Pugh, M.D., Memphis Richard W. Quisling, M.D., Nashville Robert C. Reeder, M.D., Memphis John C. Rodgers Jr., M.D., Knoxville Kieth R. Schleifer, M.D., Jacksboro Samuel A. Smith, M.D., Brentwood Robert W. Wahl, M.D., Nashville Thomas W. Williams, M.D., Etowah Eugene J. Winter, M.D., Nashville Lawrence K. Wolfe, M.D., Nashville

announcement/

CALENDAR OF MEETINGS

NATIONAL

Sept. 3-8	American Academy of Neurological and Orthopaedic Surgeons—Ballys Grand Hotel, Las Vegas					
Sept. 5-6	American Gynecological and Obstetrical Society—LaCosta, Carlsbad, Cal.					
Sept. 11-15	American Thyroid Association—Boston					
Sept. 12-17	College of American Pathologists—Hilton,					
Î	New Orleans					
Sept. 22-27	American Society of Maxillofacial Sur-					

	geons—Washington State Convention Center, Seattle				
Sept. 24-27	American Group Practice Association—Hilton Hawaiian Village, Honolulu				
Sept. 26-29	American Academy of Family Physicians—				
	Hilton, Washington, D.C.				
Sept. 27-29	American Academy of Facial Plastic and				
	Reconstructive Surgery—Hyatt Regency,				
	Kansas City, Mo.				
Sept. 27-29	American Society for Adolescent Psy-				
	chiatry—El Dorado, Santa Fe, N.M.				
Oct. 2-5	American Society for Surgery of the Hand—				
	Orlando				
Oct. 2-5	Cystic Fibrosis Foundation—Loews Anatole				
	Hotel, Dallas				
Oct. 3-5	Child Neurology Society—Hilton, Portland,				
	Ore.				
Oct. 3-6	American Academy of Pediatrics (Georgia				

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Cancer Incidence in Tennessee: Data Reported to the Tennessee Cancer Reporting System 1986-1988

TENNESSEE CANCER REPORTING ADVISORY COMMITTEE CHARLES B. PRATT, M.D., Chairman

Introduction

Cancer became a reportable disease in Tennessee following passage of the "Tennessee Cancer Reporting System Act of 1983." According to that Act, reports from Tennessee hospitals and laboratories that treated and/or diagnosed cancer are to be submitted to the Department of Health and Environment. The purpose of the reporting was "to insure an accurate and continuous source of data concerning cancer and certain precancerous and tumorous diseases, and to provide appropriate data to members of the medical, scientific, and academic research communities for purposes of authorized institutional research" (TCA § 68-1-1003). By law, all cases diagnosed after Jan. 1, 1986, were required to be reported.

In response to the Act, the Commissioner of the Department of Health and Environment (now the Department of Health) appointed the Cancer Reporting Advisory Committee, which by law consists of "at least nine, but not more than twelve members including a biostatistician, cancer registrar, epidemiologist, oncologist, pathologist, radiologist, the commissioner or his designee, and at least two additional members appointed by the commissioner." (TCA § 68-1-1005). For more information about the past and present involvement of specific individuals, please refer to the appendix at the end of this article. In addition, specifics about the methodology and the reporting instrument are presented in the November 1989 issue of the TMA *Journal*.¹

This article summarizes a portion of the reported data for the combined years 1986, 1987, and 1988. These data are aggregated in a three-year average to smooth out the random variations in reporting. In addition, the article presents in tabular and graphic form information about the reported incidence of specific, newly diagnosed cancer among residents of the state.

Methodology

Data were extracted from reports filed with the Department of Health on newly diagnosed cancers

SEPTEMBER, 1991 431

From the Tennessee Cancer Reporting System, Tennessee Department of Health, Nashville

Reprint requests to Tennessee Cancer Reporting System, Tennessee Department of Health, 419 Cordell Hull Building, Nashville, TN 37247 (Ms. Jean Moss).

CANCER INCIDENCE IN TENNESSEE/Pratt

among Tennessee's population. Race/ethnic classifications were grouped into two categories: white and nonwhite. Nonwhite includes black, native American, Asian, and other nonwhite groups. The nonwhite population of Tennessee is predominantly black; in fact, races other than black or white accounted for only 1% of the state's population in the 1990 census. Nonwhites constitute less than 20% of the state's population.

Because of the predominant proportion of blacks in Tennessee's nonwhite population, comparisons of state data with that for the nation as a whole required the use of black-only national data for an accurate analysis. The United States as a whole is more racially mixed than the state of Tennessee.

Whites comprised 86.6% of the Cancer Reporting System's cancer cases; blacks 13.2%; and others (Asian, native American, etc.) 0.1%. Race was not stated on 1.3% of the system's records.

Number of Cases

In the early years of the reporting system, a few facilities did not report complete cancer data. The number of reported cases increased annually as more facilities complied with the reporting requirements. In 1986, there were 14,460 cases reported; in 1987, 15,906 cases; and in 1988, 17,103 cases. The three-year total number of cases reported was 47,469.

The number of cases was equally distributed by gender, but there was variation by sex in the various age groups at the time of diagnosis (Fig. 1). Women predominated in the age groups 30 to 39 years and 40 to 49 years, while men accounted for the greater number of cases among those aged 60 to 69 years and 70 to 79 years.

National vs. State Data

In 1988, the American Cancer Society produced estimates of the incidence of new cancer cases in the United States based on data from the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) program (1982-1984).³ When the proportional distribution of the 1988 national estimates for selected sites was compared to equivalent data from the Tennessee Cancer Reporting System for 1988, the percentages were generally similar (Fig. 2). The two sites for which Tennessee exceeded the national average were the male lung and the female breast.

Age-adjusted cancer incidence rates by race/gender were lower in Tennessee than in the nation (Fig. 3). The greatest differential was in non-

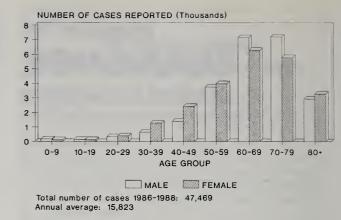
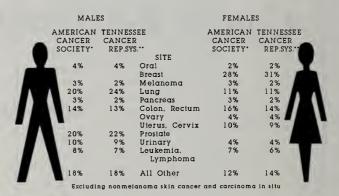


Figure 1. Total reported cancer cases by gender and age group, resident data, Tennessee, 1986-1988.



American Cancer Society National Estimates
 As reported to Tennessee Cancer Reporting System

Figure 2. Proportional distribution of new cancer cases (excluding nonmelanoma skin cancer and carcinoma in situ) by selected sites and gender, resident data, Tennessee, 1988.

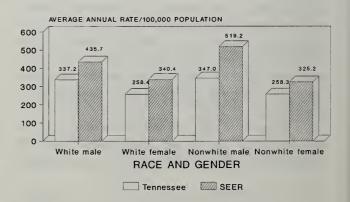
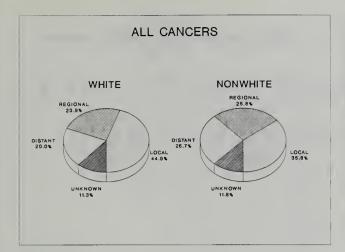
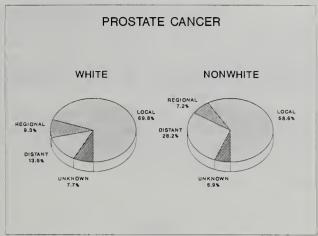
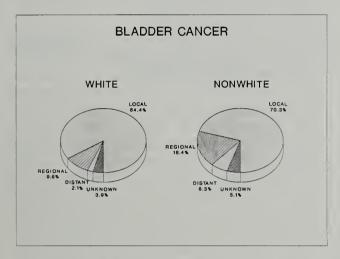


Figure 3. Age-adjusted (to the 1970 U.S. standard population) cancer incidence rates, by race and gender, resident data, Tennessee, 1986-1988. (SEER data is for 1986-1987.)







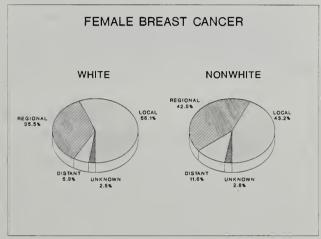


Figure 4. Percent distribution of reported cancer incidence by stage at diagnosis, and race, resident data, Tennessee, 1986-1988.

white male incidence rates. SEER data⁴ for 1986-1987 produced a rate among black men of 519.2 compared to 347.0 in Tennessee nonwhite men; the state's rate was one-third lower than the national average. Both national and state data indicate higher cancer incidence rates among men than women.

Stage at Diagnosis and Race

Nonwhites were diagnosed with cancer in the final stage of the disease (distant metastasis) at higher proportions than whites and were less likely to be diagnosed in the earliest stages of cancer when treatment should be most efficacious. In other words, nonwhites generally appeared less likely to heed the warning signs of cancer or to receive diagnostic screening to detect cancer in its early stages. The American Cancer Society states that blacks tend "to underestimate the prevalence of cancer and the chances for a cure." 5(p7) Although such a broad

generalization would not be accurate among all socioeconomic levels, the majority trend would suggest the need for greater group-specific targeting of education and screening programs for earlier detection of cancer.

The racial difference of diagnosis at late stages was obvious in selected sites, including cancer of the prostate, female breast, and bladder (Fig. 4). According to national estimates from the American Cancer Society:

Black American men have the highest incidence rate of prostate cancer of any race/ethnic group . . . The most frequent female cancer in each race/ethnic group is breast cancer . . . White men have almost double the incidence [of bladder cancer than] of any other race/ethnic group ^{5(p6)}

This report is the first official communication from the Advisory Committee of the Tennessee Cancer Reporting System. The Committee hopes the in-

CANCER INCIDENCE IN TENNESSEE/Pratt

formation provided will be helpful to those in the healing professions in their endeavors to improve the well-being of the citizens of Tennessee. Additional reports will be forthcoming.

Questions, comments, and requests for reprints or data should be directed to: Tennessee Cancer Reporting System, Tennessee Department of Health, 419 Cordell Hull Building, Nashville, TN 37247-0360; phone (615) 741-0685.

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Multi-Agent Chemotherapy in a Case of Non-Hodgkin's Lymphoma in Second Trimester of Pregnancy

DORWIN T. MOORE, M.D. and M. MARK TASLIMI, M.D.

Introduction

Hodgkin's disease occurs in 1:1,000 to 1:6,000 pregnancies¹; non-Hodgkin's lymphoma (NHL) in pregnancy is, however, a very rare event and is commonly associated with an aggressive course and disseminated disease. NHL is distinguished from Hodgkin's disease by the absence of Reed-Sternberg cells, as well as non-neoplastic inflammatory cells.² In most reported cases of NHL, chemotherapy has not been administered to the mother for fear of maternal and/or fetal complications. Review of the world literature of the past 50 years revealed 82 reported cases of NHL in pregnancy and six cases during lactation.3-7 Of the pregnant group, 73 had sufficient details reported to determine the gestational age at the time of presentation, details of treatment, and the fetal and maternal outcomes. The definition by Pauerstein⁸ for midtrimester, 15 to 28 weeks from the last menstrual period, was used. Of the 73 pregnant patients with adequate details, eight patients became pregnant while in remission.9-14 NHL was first diagnosed in 18 patients during the first trimester, 11,13,15-23 in 27 patients during the second trimester, 5,6,9,15,16,18,19,24-40 and in 20 patients during the third trimester^{6,11,16,18,40-50}; 26 (35.6%) mothers and 52 (71.2%) infants survived. Of the 27 second trimester pregnancies, multiple chemotherapeutic agents were administered to nine patients. 6,24,28,29,34,38 Four of the mothers had no evidence of disease at delivery; eight infants survived. The one fetal loss was due to an elective hysterectomy while the mother was in remission. The fetus had no structural anomalies.34

We present here the case of the ninth reported surviving infant of a mother with NHL who received multiple chemotherapeutic agents during the second trimester of pregnancy.

Case Report

A 34-year-old white gravida 5, para 2, abortus 2, came to Erlanger Medical Center at 20.5 weeks gestation with a twoweek history of progressive shortness of breath, dyspnea on exertion, orthopnea, and hemoptysis. Physical examination was essentially negative; there was no adenopathy. Chest x-ray revealed a mediastinal mass that had not been present four months earlier. Computed tomography (CT) scan confirmed the presence of an 11 × 6-cm mediastinal mass and mild hilar adenopathy. An open biopsy revealed a diffuse intermediate to high grade B cell malignant lymphoma. Offered radiation, chemotherapy, or therapeutic abortion, the patient chose to have aggressive chemotherapy. She received five courses of cyclophosphamide (1,000 mg), doxorubicin (40 mg), vincristine (2 mg), etoposide (180 mg), bleomycin (8 mg), methotrexate (180 mg), and prednisone (90 mg), and 24 hours after the last dose she went into spontaneous labor. She delivered a 35.5 week live male infant with Apgar scores of 8 and 9 at one and five minutes, respectively. There were no apparent physical anomalies, and the infant's weight, length, and head circumference were in the 75th percentile for gestational age. Following delivery, the patient received radiation therapy to the mediastinum. She was followed with CT scans, gallium scans, and magnetic resonance imaging (MRI), which revealed progressive disease to the liver, left kidney, and pancreas. Extensive bony metastases were detected by MRI, and were confirmed by bone marrow aspirate during her fourth postpartum month. Bone pain responded to radiation therapy. Later, central nervous system symptoms developed. MRI findings were consistent with a 6 to 7-mm extra-axial mass at the sixth and seventh cranial nerves and pituitary and pineal gland involvement. The patient received two courses of cytosine arabinoside (450 mg), platinol (200 mg), dexamethasone (12 mg), and intrathecal methotrexate (12 mg), but did not respond, and died during her sixth postpartum month. The infant is alive and well at 11 months of age.

Discussion

The management of pregnant women with NHL is often complicated by balancing the benefits and the side effects of chemotherapy, evaluating the stage of the disease in a pregnant abdomen, and choosing the

SEPTEMBER, 1991

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NON-HODGKIN'S LYMPHOMA IN PREGNANCY/Moore

best therapy based on the clinical and histologic findings. It is recognized that in NHL the degree of differentiation and the pattern of growth helps to determine whether the process will take an indolent or an aggressive course.^{29,51} Favorable perinatal outcome has been reported in several pregnancies after initiation of multiple agent chemotherapy during the second trimester, 16,24,28,29,34,38 though there is the potential for harm to the fetus. 16,40 None of the reported surviving infants has been followed into or beyond puberty. This report presents the tenth case of NHL in pregnancy, 16,29 treated with multiple chemotherapeutic agents during the second trimester of pregnancy without significant apparent effect on the infant. 16,24,28,29,34,38 Long-term follow-up of children may be necessary to evaluate the long-term effects on fetuses exposed to multiple chemotherapeutic agents through the second and third trimesters of pregnancy.

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Open Pelvic Fracture: A Multidisciplinary Injury

JOSEPH E. KELLEY, M.D.; AL VALLE, M.D.; and R. PHILLIP BURNS, M.D.

Introduction

Open pelvic fractures are devastating injuries with significant mortality and long-term morbidity. In recent years, an aggressive multidisciplinary management approach has dramatically reduced mortality associated with these injuries. Every trauma surgeon should have a thorough understanding of the natural history of open pelvic fractures and be able to institute an organized plan of management. We present a case that demonstrates many important points in the management of these injuries.

Case Report

A 31-year-old white man arrived at the Erlanger Trauma Center by air ambulance after a high-speed motorcycle accident in which he had been thrown approximately 75 feet, sustaining a severe straddle injury on a guardrail. MAST trousers had been inflated, and initial vital signs were blood pressure 80/55 mm Hg, pulse 144/min, respirations 28/min, and temperature 35°C. There was evidence of respiratory distress, but he was awake and oriented. Diminished breath sounds were present on the right, with palpable crepitus. A right chest tube was inserted, relieving a hemopneumothorax, but with no change in vital signs. The neck veins were flat. An 8.5 French right subclavian catheter was inserted and resuscitation was continued with O neg blood through a level I blood warmer. An extensive laceration involved the right groin, scrotum, perineum, buttock, and anus, from which there was brisk hemorrhage (Fig. 1). The wound was packed, and MAST trousers were reinflated. Arrangements were made for arteriography, fresh-frozen plasma (FFP) was thawed, and active rewarming was continued. Pelvic x-rays showed comminuted bilateral pubic ramus fractures, a right acetabular fracture, and vertical displacement of the right hemipelvis. Retrograde urethrogram and cystogram were normal. Pelvic arteriography revealed a bleeding right hypogastric artery, which was successfully embolized. The patient was taken to surgery where pelvic external fixation and right femoral traction pin were instituted. An exploratory laparotomy identified no significant intra-abdominal injury. A sigmoid colostomy and mucous fistula were created, and rigid sigmoidoscopy revealed that though there was a laceration of the external and internal anal sphincters and anal mucosa, there were no rectal injuries above this point. The mucous fistula was copiously irrigated with antibiotic solution, and the anal mucosa and external sphincter were repaired primarily. The right testicle had been eviscerated but it was viable, and was replaced in the scrotum, which was repaired and drained. The remainder of the wound was debrided vigorously, irrigated with antibiotic solution under pressure, and packed with antibiotic-soaked gauze. Twelve units of blood and 4 units of FFP were given during the first 36 hours.

Broad-spectrum antimicrobial therapy was begun with ampicillin/sulbactam and difluconazole. The wound was cultured, operatively debrided, and repacked daily for seven days. At the end of one week, it was granulating nicely and all cultures were negative. A gracilis myocutaneous pedicle flap was rotated, and the wound closed (Fig. 2). Intensive physical therapy and psychological counseling were instituted. The patient was discharged on the 17th hospital day with wounds healing nicely. He was ambulatory with a walker, not bearing weight on his right leg, with an external fixator in place.

At six months, rectal manometry was normal, and colostomy closure was completed. Sexual function was intact, and he was walking independently with minimal limb-length discrepancy.



Figure 1. Initial injury with eviscerated testicle, exposed pubic rami, and anal laceration.

From the Department of Surgery, University of Tennessee College of Medicine, Chattanooga Unit.

Discussion

Open pelvic fractures are defined as pelvic fractures with violation of the skin. genitourinary system, or gastrointestinal system. These are devastating injuries, with an extremely high morbidity and mortality. As recently as 1978, Rothenberger¹ reported a 50% mortality for open pelvic fractures, with immediate mortality due to hemorrhage, and delayed death to pelvic sepsis. A few patients died from associated injuries, but 73% of deaths were directly related to the pelvic fracture. More recently, Richardson et al² and Kudsk et al³ reported mortality rates of 6% and 33%, respectively. All deaths in these series were immediate, and were due to exsanguinating hemorrhage or associated injury. Septic complications were minimized by fecal diversion, aggressive debridement, broad-spectrum antibiotics, and mandatory daily irrigation and debridement. Since adopting these principles of management at our institution, we have had no deaths and minimal infectious complications.

Hemorrhage is the primary immediate concern in these injuries. External hemorrhage is controlled initially with packs and application of MAST trousers. Early arteriography with embolization of arterial hemorrhage and application of external fixators to tamponade venous hemorrhage should be employed in grossly unstable fractures and when local measures fail. Rarely, internal packing at laparotomy, combined with external fixation, will be necessary. In patients with extensive associated major vascular and extremity trauma,

primary amputation and hemipelvectomy are sometimes necessary as lifesaving measures.

Equally important in the management of hemorrhage is avoidance of hypothermia and dilutional coagulopathy. These patients usually require frequent intrafacility transportation and prolonged exposure during initial management. Hypothermia can be avoided by continuous, active warming and attention to environmental control. In anticipation of massive transfusions, requests for FFP and platelets should be made early in the treatment protocol.

Though other sources of intra-abdominal hemorrhage must be ruled out, they were found in less than 10% of open pelvic fractures in reported series. The role of diagnostic peritoneal lavage (DPL) in pelvic fracture patients has been questioned in the past, but recent studies have shown a false-positive rate of less than 10% utilizing an open supraumbilical technique, especially if performed early. In the exsanguinating patient, DPL may occasionally help one decide whether to proceed to arteriography or directly to the operating suite. In other patients, mandatory laparotomy and fecal diversion obviate the need for DPL.

Associated genitourinary injuries are common in open pelvic fractures. Because 57% of patients with urethral injuries will not have external signs of the injury, retrograde urethrograms are necessary before catheterization. Bladder injuries are also common, and cystography must be performed. Urethral injuries are best managed conservatively with suprapubic cystostomy and delayed repair. Bladder injuries are managed



Figure 2. Appearance one week later after repair of anal laceration and closure with a gracilis myocutaneous flap.

by conventional techniques with generous drainage of the perivesicle space in cases of extraperitoneal extravasation. Vaginal lacerations must be identified and managed in conjunction with gynecologic consultation. An often unrecognized sequela of open pelvic fracture is vasculogenic impotence. Its incidence has been reported to be as high as 50%, and the use of bilateral hypogastric artery embolization will increase the risk of this complication.5 The next treatment priority is the management of soft tissue wounds. Thorough debridement of all devitalized tissue and foreign material is paramount. Wounds are left open and treated with daily operative irrigation, debridement, and repacking employing antibiotic solutions and pressurized irrigation. It cannot be overemphasized that these explorations are necessary to avoid septic complications. When wound granulation begins and all intraoperative cultures are negative, the wound is closed. A delayed primary closure can occasionally be accomplished, but grafting or flap closure is usually necessary, as in this case.

Fecal diversion is necessary whenever perineal and buttock lacerations accompany open pelvic fractures. An end colostomy is preferable, with an associated mucous fistula to facilitate evacuation and irrigation of the distal segment. When all perineal wounds have healed, continuity of the colon can be reestablished provided the anal sphincter mechanism is intact.

Broad-spectrum antibiotics are used until all exposed bone is covered. These antibiotics should cover betalactamase positive staphylococci, gram-negative enteric pathogens, and anaerobes. Because of problems with secondary yeast colonization, we employ prophylactic difluconazole.

General support of the patient, including nutrition

and stress ulcer prophylaxis, is critical. The incidence of deep venous thrombosis has been reported to be as high as 35% in open pelvic fractures, and we use adjusted-dose subcutaneous heparin and sequential compression devices aggressively. These patients often have profound functional disabilities, and early physical therapy is crucial. Psychological support is also very important in keeping the patients motivated and in helping them to deal with their functional impairments.

Conclusion

Open pelvic fractures are devastating injuries that challenge even the best of trauma surgeons, and their immediate and long-term management require the rapid mobilization of a well-coordinated multidisciplinary team. There are numerous decision points throughout the course of management, and each is equally important to the final outcome. The cornerstones of treatment are rapid control of hemorrhage, management of other life-threatening injuries, appropriate management of associated injuries, fecal diversion, aggressive wound care, broad-spectrum antibiotic therapy, compulsive postoperative care, and coordinated rehabilitation. Utilization of these measures can greatly reduce the morbidity and mortality of these complex injuries.

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April 1992								
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Hereditary Angioneurotic Edema

Case Report

A 39-year-old woman came to the Nashville General Hospital emergency room complaining of a swollen tongue and jaw. She had awakened at 3:00 AM with a "thick, heavy" tongue and arrived at the hospital four hours later after two diphenhydramine tablets had failed to give relief. She denied recent trauma to her face or neck, exposure to toxins or unusual foods, and gave no history of insect bite or contact with animals. She took no regular medications. The patient denied

any difficulty breathing.

A review of her old chart revealed that she carried the diagnosis of hereditary angioneurotic edema. Twelve years ago she had an episode of laryngeal edema following a tooth extraction, and required emergency tracheostomy. Serum samples sent to the National Institutes of Health at that time revealed a complement 1 esterase inhibitor (C1 INH) deficiency. Epsilon aminocaproic acid was prescribed. She subsequently had occasional swelling of her hands or feet, but no recurrence of upper airway problems. She had discontinued her medication due to financial difficulty four months before she was seen in the emergency room. A great-great-grandmother had similar problems with recurrent edema, but lived to "old age." None of the patient's five siblings have any such problems.

Physical examination revealed a pleasant woman in no distress. Her temperature was 98.4°F, respirations 20/min and unlabored, pulse 100/min and regular, and blood pressure 130/82 mm Hg. She had bilateral submandibular edema, a markedly edematous tongue, and an old healed scar from her previous tracheostomy. Auscultation of the heart and lungs was unremarkable, as was the remainder of her examination. Laboratory data were within normal limits with the exception of C1 INH activity, which was markedly decreased at 6% (normal >67%). The patient was treated with subcutaneous epinephrine, intravenous solumedrol and diphenhydramine, and admitted to the intensive care unit for observation. Over the next several hours, her facial and tongue edema resolved and her 36-hour hospital course was without event. Treatment was restarted with epsilon aminocaproic acid, and provisions were made to insure that she could obtain medication despite her financial difficulty.

She has been seen in the outpatient clinic several times, and her only complaints are of occasional short-lived episodes of edema of hands or feet.

Discussion

Hereditary angioneurotic edema was initially described by Sir William Osler in 1888 when a 24-yearold woman was admitted to his service at the Philadelphia Infirmary with "attacks of transient swelling in various parts...."1,2 Osler identified the genetic basis for this problem by obtaining a history of similar episodes in five generations of the patient's family,

Prepared by James M. Heery, M.D., chief medical resident, Metropolitan Nashville General Hospital.

demonstrating an autosomal dominant pattern of inheritance.1,2

Hereditary angioedema is characterized by swelling of the face and extremities, episodes of laryngeal edema, and acute gastrointestinal attacks (abdominal pain) caused by edema of the bowel wall.³ Occasionally the edema will be accompanied by a nonpruritic, erythematous rash. Urticaria associated with angioedema suggests another diagnosis.4

Trauma is a common precipitating factor in attacks of hereditary angioedema, and emotional upset evokes symptoms in 30% to 40% of patients with this disorder.4 Attacks also can be precipitated by such normal activities as walking, typing, and standing in place.5 The frequency of attacks is highly variable, with some patients going years between attacks and others having attacks every few weeks.

Attacks of laryngeal edema present the greatest danger to these patients, with a significant number requiring tracheostomy at some point during their disease.4 Obstruction typically begins slowly with hoarseness and dysphagia.5

Hereditary angioedema is defined biochemically as a disorder of a serum protein, C1 INH. There are common and variant forms; patients with the common form have decreased amounts of C1 INH, whereas patients with the variant form have a normal amount of C1 INH but with decreased function. Approximately 85% of patients with hereditary angioedema have the common form.4 The exact nature of the relationship between C1 INH deficiency and angioedema is unknown.4 There is an increased incidence of autoimmune disease in these

During attacks of angioedema the PCV, WBC, differential, and ESR are usually normal, as are commonly ordered complement studies, C3 and CH50.4 Helpful laboratory tests are C4 level, which is low in virtually all patients with acute hereditary angioedema, and C1 INH level, which is low in those patients with the common form of the disease.5

Acute attacks are managed supportively with particular attention to the airway. Therapy with epinephrine, steroids, and antihistaminic agents is of questionable benefit, but is usually done nonetheless.4.5 C1 INH concentrate is available, and is used in Europe for treatment of acute attacks. It is not currently available in the United States.5 For patients with frequent attacks or those with a history of laryngeal edema, longterm therapy with epsilon aminocaproic acid or danazol has been successful in reducing both the frequency and duration of attacks.6,7

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A Case of Recurrent Pneumonia

Case Report

A 50-year-old woman was scheduled for admission to the vascular surgery service at Vanderbilt University Hospital (VUH) for a possible revascularization procedure to correct her severe exertional claudication. Upon arrival, she was febrile, with a temperature of 102.8°F, and was tachypneic, with audible wheezing. She reported that in the four days before admission she had experienced subjective fever, hacking cough productive of scant, white sputum, and easy fatiguability. Interestingly, she had had similar symptoms approximately six months earlier in the late summer. She had been admitted to the VUH at that time and was treated for an atypical pneumonia.

Her evaluation during that admission included HIV testing, routine blood and sputum cultures, Legionella culture, AFB smears, and three AFB cultures, all of which were negative. The Westergren erythrocyte sedimentation rate (ESR) was 116 mm/hr. CT scan of the chest showed diffuse infiltrates, and bronchoscopy with bronchoalveolar lavage and biopsy was nondiagnostic. She received a prolonged course of intravenous erythromycin and cefotaxime, and her illness slowly resolved. She remained relatively asymptomatic until her present illness despite smoking a half a pack of cigarettes per day.

Her initial physical examination showed an ill-appearing woman with a heart rate of 72/min and respiratory rate of 24/min. There were diffuse expiratory wheezes and soft crackles in the mid-right lung field; examinations of the heart and abdomen were unremarkable. She had no palpable right lower extremity pulses, but did have a 2+ left dorsalis pedis pulse. Radiograph of the chest showed dense interstitial infiltrates involving five lobes. Arterial blood gas analysis on breathing room air showed a pH of 7.44, Pco₂ 34 mm Hg, and Po₂ 54 mm Hg. WBC count was 7,700/cu mm, with 13% eosinophils; the hematocrit was 32.0%, and the ESR 86 mm/hr.

Cultures were obtained, and intravenous erythromycin and cefotaxime were prescribed. Despite this antibiotic regimen, she remained febrile and her condition worsened, as evidenced by her chest radiograph. The poor response to antibiotics, the recurrent nature of her illness, her peripheral eosinophilia, and elevated ESR were all consistent with a hypersensitivity pneumonitis, and careful questioning revealed that during the warm months of the year she sprayed her chickens with Raid® to keep insects away. She used approximately one can of the

Prepared by Thomas J. Lewis, M.D., medical resident, Vanderbilt University Hospital, Nashville.

insecticide per week, and had experienced coughing spells and watering of her eyes during its use. She had not used the insecticide since her previous hospitalization until a week before this admission, with the onset of warmer weather.

Her antibiotics were discontinued, and solumedrol provided dramatic improvement; she defervesced, her bronchospasm decreased, and after five days of therapy, her chest radiograph was clear. She was discharged on a tapering dose of oral prednisone and instructions to avoid the use of Raid®. She has done well at home and has remained asymptomatic.

Discussion

Hypersensitivity pneumonitis to pyrethrum, the active ingredient in Raid® and over 2,000 other insect sprays and powders, has been well-described,1 though pyrethrum is just one of a number of heterogenous substances that trigger an immune-mediated response resulting in hypersensitivity pneumonitis. Despite the vast array of offending antigens, the mechanism of injury, diagnosis, and treatment for all types of hypersensitivity pneumonitis are essentially the same. The antigenic particles are usually inhaled organic dust, of less than 5 µ in diameter; they reach the distal portion of the lung and cause both allergic alveolitis and interstitial changes.² Fever, cough, and dyspnea characteristically develop four to six hours after exposure to the offending antigen, and are often accompanied by hypoxemia, hypocapnia, leukocytosis with eosinophilia, and multiple pulmonary infiltrates on the chest radiograph. When the offending antigen is removed, the symptoms resolve quickly, sometimes within several hours, but they can persist with repeated exposures.^{3,4} Diagnosis is best made from a careful clinical history that suggests a temporal relationship between the symptoms and the exposure. Remission of symptoms after removal of the offending antigen confirms the diagnosis. A controlled laboratory inhalation challenge is the only method to prove a direct relationship between the suspected an-

(Continued on page 444)

Radiology Case of the Month

THOMAS P. SHORT, M.D.; DONALD C. DONAHUE, M.D.; and EAPEN THOMAS, M.D.

Case Report

A 61-year-old white woman was admitted with increasing dyspnea and pain in the upper abdomen. She also complained of chronic cough that was productive of yellow sputum. Her primary physician discovered a left-sided pleural effusion. On physical examination she was afebrile with scattered rhonchi and no lymphagenopathy, but the liver was thought to be enlarged 5 cm below the right costal margin, and was firm, nodular, and slightly tender; there was no ascites. Her hemoglobin was 13.7 gm/dl, total bilirubin 2.8 mg/dl, alkaline phosphatase 941 IU/L, SGOT 201 U/L, SGPT 85 U/L, and LDH 444 IU/L. Thoracentesis was planned. The abdominal CT scan is shown (Fig. 1).

Please select the best answer from the choices given below:

- (1) Polycystic liver disease
- (2) Caroli's disease
- (3) Pyogenic liver abscess
- (4) Metastatic cancer to the liver

Discussion

Fig. 1 shows a CT scan of the liver. Multiple lowdensity lesions distort and enlarge the liver. The differential diagnosis of this type of abnormality includes polycystic liver disease, an autosomal dominant disease usually developing in adulthood and in 50% of cases associated with polycystic kidney disease!; it may be an isolated finding, however female subjects are affected about twice as often as male ones. Typically, there are a large number of cysts of different size that have sharp margins and are usually not spherical as our case is. The center of the cysts is homogeneous and of the same density as water. Our case shows central areas of differing densities. Cholangiography shows splaying of bile ducts, resembling metastatic tumor. Lack of encasement of vessels on angiography may help differentiate it from avascular metastases.

Caroli's disease is a congenital condition, generally occurring in childhood or early adulthood; there is intrahepatic cystic dilatation of the bile ducts, and there may be abdominal pain, fever, and gram-negative sepsis. Jaundice is usually minimal or absent. These cysts are arranged radially, and not in a random fashion as in this case. Additionally, some of them may appear tubular, communicating with localized ectatic areas. Sometimes, higher density material is found within the dilated ducts, representing debris or noncalcified stones. Direct injection of cholangiographic agents along with other radiopharmaceuticals can show the communica-



Figure 1. CT scan of the liver showing multiple low-density lesions.

tion of these cysts with the rest of the biliary tract.² There is usually saccular dilatation of the intrahepatic biliary tree with communicating cystic spaces, almost always involving both lobes of the liver.

Pyogenic liver abscesses appear as multiple hypodense (cystic) lesions. The liver becomes seeded by bacteria, usually from the biliary tract (ascending cholangitis) or the large bowel (diverticulitis) and the patient experiences fever and upper abdominal pain. They have a predilection for the right lobe of the liver.³ Abscesses may show varying densities and their central zone may show septations and gas, although the latter is seen less than 50% of the time. Our case is not consistent with this picture because of the homogeneity in size and lack of septations and gas within the lesions. Dynamic CT may show a pattern of peripheral enhancement. A "double target sign" consisting of a hypodense central area surrounded first by a hyperdense ring and then a hypodense zone is considered highly suggestive.⁴

The CT scan in our case is most consistent with multiple tumor metastases that are of low density or have become cystic. It is believed that most metastases are solid which then proceed to become necrotic and then cystic, with a thin rim of residual neoplastic tissue. As in our case, they tend to be centrally situated, and may resemble benign cysts. Sonography may be of immense value in these cases. Our case is unusual in that only cystic metastases can be seen. A fine needle aspiration

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biopsy of the liver revealed metastatic small cell lung cancer. A variety of CT appearances has been described in metastatic liver disease. Lesions can be of varying size, multiple or solitary, and well or poorly defined. Calcifications may occur in some, depending on the primary source. The key to diagnosis is to increase contrast between the suspected lesions and normal hepatic parenchyma through intravenous contrast injection. Most malignant hepatic lesions receive most of their blood supply from the hepatic arterial system. Thus, these lesions will be enhanced by contrast material 10 to 20 seconds earlier than normal liver parenchymal tissue will.⁶

ANSWER: (4) Metastatic small cell cancer to the liver.

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Vanderbilt Morning Report . . .

(Continued from page 442)

tigen and the disease process, but is often avoided because it may produce severe pneumonitis.³

The key to treatment of hypersensitivity pneumonitis is the recognition and subsequent elimination of the etiologic agent. Mild attacks clear spontaneously with removal of exposure, but more severe attacks require treatment with corticosteroids at doses equivalent to prednisone 60 mg/day, as well as supportive measures such as bed rest and supplemental oxygen.^{3,4}

Hypersensitivity pneumonitis is a treatable cause of

acute pulmonary disease; it should be diagnosed by a careful clinical history focusing on environmental exposures.

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Introductory Statement

JOHN P. LITTLE, Student Editor University of Tennessee, Memphis

It is with much excitement that we present "Progress Notes," a new Medical Student Section in the Journal of the Tennessee Medical Association. This page is devoted to Tennessee medical student news, issues, and research. Each month we will feature either an editorial or a research abstract in addition to current news of interest to students.

The idea for "Progress Notes" came during a teleconference call in the fall of 1990 among members of the Governing Council of the TMA Medical Student Section. We realized at that time the Journal had no medical student page similar to "Pulse" in the Journal of the American Medical Association. Our objective was to create such a forum to increase communication among medical students in each of the four colleges of medicine in Tennessee and to provide an avenue for students to reveal their opinions in addition to their accomplishments in various fields of research.

As a result of those efforts and the receptiveness of Dr. Thomison, the Journal, and other members of the TMA to our proposals, we are fortunate to be in print after only one year as a new addition to the Journal. On behalf of the student editors of the Journal, it is my pleasure to welcome you to "Progress Notes."

Herpes Gestationis Following Normal First Pregnancy

E. SCOTT SILLS, B.A. BILL C. MABIE, M.D. University of Tennessee, Memphis

Herpes gestationis (HG) is an autoimmune vesiculobullous disease of pregnancy and the puerperium with a reported incidence of 1:60,000.1.2 While skipping of pregnancies is rare, HG generally appears in all pregnancies and tends to develop earlier and be more severe with subsequent gestations.3 Contraceptive management in such patients can be challenging, as estrogen-containing oral contraceptives as well as menses are known to amplify symptoms.4

Although the precise etiology of this condition remains unknown, the greatest risk of HG has been associated with the concurrent presence of two specific histocompatibility leukocyte antigen markers: HLA-DR3 alone (found in 61% of HG patients), and HLA-DR3 + HLA-DR4 (found in 43% of HG patients).⁵ In our study, a debilitating case of HG that occurred in a second pregnancy is described. The first pregnancy was uneventful and with good fetal outcome. Immunoflourescence study of the lesions was performed to confirm the diagnosis. HLA typing did not show HLA-DR3, but HLA-DR4 was identified with another marker of unknown significance, HLA-DR7. In this case report, proposed pathogenesis, treatment, and prognosis of HG are discussed, with special attention to family planning and contraceptive issues.

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Who Said it Would Be Fair?

J. KELLEY AVERY, M.D.

Foreword—The truth is that the caliber of medical practice is almost always very good and meets any test of reasonableness that could be applied. In the "Case of the Month," where we are pointing out the ways that loss could have been prevented in cases where the care did not meet an acceptable standard, it is easy to lose sight of that fact. Occasionally it is needful to demonstrate the uncertainties of the medical-legal environment by presenting a case where the management was thought to be good and the loss occurred anyway. The case that follows is one of those.

Case Report

The patient was the product of a difficult labor and delivery three months before the case in question begins. The mother was a 16-year-old smoker. After attempts by the obstetrician to deliver this baby by first applying Kielland forceps, then trying Simpson-DeLee outlet forceps, the patient was taken for cesarean section. The baby had very poor Apgar scores and was cyanotic, requiring oxygen support. About four hours after delivery the baby's rectal temperature was recorded as 96.9°F and the blood sugar was recorded as 32 mg/dl. This was promptly corrected and the child left the nursery at 6 days of age, nursing well.

This little patient was doing well at 2 months of age, when seen in the office of the attending physician. The weight and height were within normal range, and it was recorded that the immunizations were being given by the county health department.

Two months later, at 1:24 AM, the patient was seen in the hospital emergency room (ER) with cough and diarrhea. On physical examination, the baby was wheezing and grunting on respiration. The rectal temperature was 97.9°F, pulse 160/min, and respirations 60/min. There was typical thrush in the mouth. The chest x-ray was suspicious of an infiltrative process, and the child was admitted with a diagnosis of thrush and "Rule out pneumonitis."

The attending physician, who practiced in a group of three pediatricians, was called and agreed with the ER physician's orders of Amoxicillin, Mycostatin, routine formula, mist tent, and throat culture. The nurse carried out the orders and noted that the child was pale, had audible wheezes, and did not appear to "focus on anything" visually. The admitting physician, on call for his group the night of admission, came in to see the baby early the next morning and gave an order to discontinue the mist tent since the patient appeared so very fretful in it.

Again it was observed that the eyes did not appear to focus on anything.

The child did not improve during the first few hours in the hospital and the tent was restarted. Another one of the group of pediatricians saw the baby and ordered intramuscular steroids, and an increase in the antibiotic coverage. The bronchial dilator, Isuprel, had been ordered on admission. An ophthalmologist who was consulted thought that the optic nerves were hypoplastic. He placed great weight on the history of "blindness since birth" in one of the grandmothers. He asked to see the patient in his office after discharge from the hospital.

The baby continued to have respiratory difficulties, and about 24 hours after admission, another one of the attending physician's associates changed the bronchial dilator to theophylline (Marax) 2 cc every four hours. The child continued to be fretful and cried almost constantly, becoming increasingly irritable and requiring some sedation. The attending physician visited the second morning after admission and detected no significant change in the patient's condition. Later in that day, the attending physician ordered Phenergan suppositories 12.5 mg every four hours as needed for restlessness. These were given three times in the eight hours after they were ordered.

The baby continued to be extremely fretful, crying almost constantly, and eating and drinking almost nothing. The wheezing continued unchecked. About 22 hours after admission, a nurse found the child lying on his stomach and not breathing. CPR was begun immediately; the attending physician came in promptly. With "bag breathing" the infant regained spontaneous respirations, but within the hour, the patient vomited, aspirated, and arrested again. The attending physician intubated the child without difficulty and a transfer to a children's hospital was promptly made.

In the children's hospital, the patient was put on a ventilator and given phenobarbital. Sodium bicarbonate was given to correct the respiratory acidosis and the patient slowly improved. A blood level for theophylline was obtained on admission to the receiving hospital and was found to be 20.5 μ g. The baby was described to have "twitching of seizures" shortly after admission, for which Dilantin was prescribed later in the stay. Liver studies were negative for any evidence of hepatitis in the face of an admission SGOT of 600 U/L.

One of the treating physicians in the receiving hospital responded directly to an inquiry from an attorney representing the patient, and in the letter speculated that the level of theophylline may have been in the "toxic range" in the referring hospital.

The lawsuit filed alleged that the improper treatment in the community hospital caused the blindness and the mental retardation. The case was first filed in the circuit court of Tennessee, subsequently non-suited and refiled in the federal district court where the first trial ended in a hung jury. Codefendants, the hospital, and the manufacturer of the

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Dr. Avery is chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood, and associate director of Medical Affairs, St. Thomas Hospital, Nashville.

Childhood Lead Poisoning Prevention

SARAH H. SELL, M.D. and H. LEE FLESHOOD, Ph.D.

Introduction

Lead poisoning among children is a major preventable public health problem in the United States. Virtually all organ systems are affected by lead, and the adverse effects on cognitive development and behavior in children are of special concern. 1-5 Currently the case definition for lead toxicity recommended by the U.S. Centers for Disease Control (CDC) is a blood lead level (BLL) of \geq 25 µg/dl. 3 Due to growing evidence that BLL in the range of \geq 10 to 15 µg/dl can have permanent adverse effects in children, 4.5 it is expected that the CDC will have a revised case definition this year.

Lead-based paint found in houses, especially those built before 1977 (when federal law prohibited lead in house paint), is the main source of exposure for children. Other sources are airborne lead (e.g., smelters, gasoline); soil and dust; food and water (lead-containing solder in water pipes and lead-lined water coolers); pottery; and adults who bring lead dust home on their clothes after occupational exposure. A large dose of lead can be ingested with a single paint chip, but mouthing of hands, toys, and other objects by toddlers is another primary route of exposure.

Tennessee Update

During the calendar years of 1989-1990, the Tennessee Department of Health and Environment conducted a pilot study screening for lead in blood of young children between the ages of 9 months and 6 years in the Medicaid Early Periodic Screening, Diagnosis and Treatment (EPSDT) program. The study was two-pronged. One portion dealt with children whose BLL were ≥25 µg/dl and provided follow-up confirmation tests and referrals to pediatricians for further physical evaluation. The other portion dealt with efforts by environmentalists to find the source(s) of the lead and deal with its elimination. Preliminary results revealed that lead is a significant problem across the state. In almost every county where diligent efforts were made to test the children, cases of lead toxicity were found.

The most recent Medicaid guidelines require lead toxicity testing for all children between ages 1 and 5 years in the EPSDT program, which is now known in Tennessee as "Check-ups for Children and Teens" (CUFCAT). A bulletin of these guidelines has been published recently and made available to all Medicaid medical providers in the state.

The principal treatment for lowering the lead level in poisoned children is to remove the source. When a positive test is confirmed, trained environmentalists, along with a public health nurse, should conduct an inspection of the home and surrounding areas. If the source is not found, further investigation of other places in which the child spends time, such as day care or grand-parents' home, is indicated. Food and general sanitation personnel in the regional offices of the state Department of Health have been trained to conduct these investigations.

Removal of lead from painted surfaces is dangerous in that the freed-up dust or flakes are laden with the toxic substance. Inhalation by workers should be prevented by protective gear, including respirators and complete cover-up apparel. Persons living in the home should be evacuated during the process. Carpets or upholstery that receive the leaded dust are almost impossible to clean; therefore, such items should be removed or securely covered before starting. A special heavy-duty vacuum is needed to clear away dust from floors and other hard surfaces. Specially trained personnel should be employed for the removal process. The final proof of successful clean-up is the falling BLL in the patient. This is a very expensive process.

Currently there are two major categories of products promoted by private industry as less expensive alternatives to complete removal of lead. One is "encapsulants," flowable liquids. The other is "enclosures," products such as vinyl wall coverings, wall board, and aluminum siding. The U.S. Environmental Protection Agency (EPA) and the U.S. Housing and Development Agency are developing guidelines for certifying encapsulants for certain properties such as durability and product toxicity. EPA is sponsoring research to evaluate the effectiveness of selected encapsulants in lead paint abatement.

From the Tennessee Department of Health, Nashville. Dr. Sell is director of the TDH Environmental Epidemiology Section and Dr. Fleshood is director of Program Evaluation and Data Management for the TDH Maternal and Child Health Section.

The BLL test no longer requires 10 ml of venous blood. The process is now simplified for physicians. Most certified commercial clinical laboratories use atomic adsorption, which can be performed on 100 µl of blood, as the preferred method of blood lead analysis. Medicaid now approves this method, which can be performed on finger prick samples. The laboratories will supply all the needed equipment, pick up the samples promptly, and report results in about two days. The bills will be sent directly to Medicaid.

All of the children in the pilot study with BLL ≥25 µg/dl have been either asymptomatic or only mildly symptomatic. We recommended that they be referred to a pediatrician for a thorough physical examination, especially, a careful neurologic evaluation. X-rays of long bones were helpful to determine the "burden of lead" if dark lines were present at growth zones. Four of our patients have undergone chelation therapy; most of the others were moved to a different house or were removed from the source.

The greatest potential harm from low-level lead poisoning has been shown to be in neurobehavioral abnormalities and intellectual impairment, which seem to be permanent.^{4,5} Therefore, it behooves all physicians to refresh their knowledge about lead poisoning in our young patients and take advantage of support services that are now available. Questions about public health lead screening activities should be directed to Sarah Sell, M.D., director of the Department's Environmental Epidemiology Section, at (615) 741-5683, or to your local health department.

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 Needleman HL, Gatsonis CA: Low-level lead exposure and the IQ of children.

Loss Prevention Case of the Month . . .

(Continued from page 446)

theophylline settled with the plaintiff, leaving our pediatricians as the sole defendants.

There was sufficient expert testimony regarding the theophylline level and the chances of a filing against the obstetrician, who was not sued in this case, to justify a compromise settlement.

Loss Prevention Comments

This case was reviewed on two occasions by the SMVIC Physicians' Claims Review Committee, and each time, while the dangers of the letter from the receiving hospital were apparent and the involvement of all three of the physicians in this group might give rise to the claim during trial that the care of this baby was fragmented and uncoordinated, there was the unanimous opinion that there was no deviation from an acceptable

level of care.

In this kind of case, where there is no detectable medical error and we still lose, the area of management that we need to scrupulously examine is the area of the physician/patient relationship. A failure in this area will not make itself readily discernible from a study of the medical record. Questions that we must ask are: Was the family kept constantly aware of our attention to the patient? Did we take the time to communicate to them our real concern for the one we were treating? Did the individual members of the treatment team communicate with each other to give our patient the benefit of our collective wisdom? Each time we raise these questions with ourselves, we become more conscious of the very real personal elements of our daily work.

Patient Relations Guidelines: Dealing With Your Patients on the Telephone

ROBERT BOWERS, M.D., Chairman
TMA Communications and Public Service Committee

The first—and sometimes the last—impression your office makes with a patient is with the telephone. On the phone, your patients pick up clues as to how they will be treated in the office. Ensuring that your staff deals appropriately with callers is vital to successful patient relations.

As part of our CARE program, the Tennessee Medical Association wants to help you create open, two-way communication with your patients.

Following are telephone tips for you to consider implementing with your employees who deal with patients on the phone. Some of them may already be part of your office routine, others may be new ideas. They were gathered through informal focus groups and research with physician offices, and were used with our Mission: Possible program last year.

- Answer the phone by the third ring. Letting the phone continue ringing is a signal not only to the patient on the phone, but also to the patients in your office who hear it, that you are not as organized as you should be. One way to make sure the phone is answered quickly is for everyone to be willing to do it. Get past the "it's not my job" syndrome. If a call cannot be handled promptly, then give a brief explanation and apology. But hurry back to that caller (and to others on hold).
- Always be pleasant, no matter how busy you are or how the patient responds. Your office is probably always busy, but if that comes across on the phone, the patient may feel rushed, and believe that his situation is not important to the staff. Occasionally, patients may not be very nice on the phone, especially if they don't feel well. You and your staff will have to make an extra effort to respond politely. If the patient is sick, you may also need to speak especially clearly and slowly, and check to make sure the patient understands what you are saying. If a patient has a complaint, listen, and don't get defensive. Be sympathetic to his condition.
- Call each day to confirm the next day's appointments. This should be part of your scheduling nurse's routine, and will save you from forgotten appointments that can throw you off schedule and affect other patients who have appointments that day.
- When possible, call patients to let them know if the schedule is running behind or if there has been a

cancellation. See if they would like to reschedule for the next day or later in the week. Warning them that the physician's schedule has been knocked off course will at least give them time to adjust *their* plans or bring something to do while they wait. This shows that you are considerate of *their* busy schedules too.

- Ask the phone company to do a phone analysis. It can tell you if you have enough phone lines to accommodate the number of calls from your patients.
- If patients want to speak specifically to the physician, the physician should be the one to call them back. Research shows that Tennesseans want to receive more personal attention from their doctors, to feel like more than a name on a file. A phone call from the physician can go a long way toward addressing that need and creating good relations with your patients.
- If patients have questions that can be answered by another staff member, be sure their questions are answered quickly and thoroughly. In some practices it works well to set aside a certain time each day for the doctor or another qualified staff member to return patients' phone calls and answer their questions. In doing that, the patients know when to expect the call and "telephone tag" is avoided. This can save time for everyone in the long run.
- Give the patients a deadline for learning the results of laboratory work, and tell them to call the office if they haven't heard from you within that time. Even the best organized staff may forget to call a patient if the laboratory has neglected to send the results. If a patient does not hear from your office, he may assume the tests were normal, which could lead to serious problems if the oversight is not caught. Your patients are probably worried about the tests, so call as soon as results are available.
- Have a friend call in as a patient, not to "catch" your staff, but to get an objective impression as to the way calls are handled. You may get new insights about your office's image from the patient's end of the phone line that you would never pick up on from your end.

Please share with us any helpful information that your office uses when using the telephone. The TMA is here to serve you and, in turn, help you establish better relationships with your patients.

THE UNITED STATES ARMY RESERVE

HEALTH CARE PROFESSIONALS BONUS TEST PROGRAM

\$10,000 - \$20,000 - \$30,000

The 1989 National Defense Authorization Act required that the Department of Defense conduct a test to determine the effectiveness of a recruitment bonus to attract health care professionals to the Selective Reserve of the Army. The 1991 National Defense Authorization Act directed that the test continue.

The Bonus Test Program is offered to physicians in the following specialties:

ANESTHESIOLOGY ORTHOPAEDIC SURGERY and

GENERAL SURGERY

(Including selected subspecialties)

Applicants must be board certified or meet all requirements for board candidacy in one of the above specialties.

BONUS ELIGIBILITY: In addition to meeting all criteria for appointment as a medical corps officer in the US Army Reserve, Bonus Test applicants must be civilians and if prior service, discharged before 28 April 1989.

BONUS AMOUNTS: The test offers \$10,000 bonus for each year of affiliation with the Selected Reserve of the Army, up to a maximum of 3 years. Physicians must choose 1, 2, or 3 years of affiliation at time of application. Bonuses will be paid annually at the beginning of each year of agreed affiliation.

TEST PARAMETERS: The design of the test stipulates that bonuses be offered in certain geographic areas. To qualify, applicants must reside within those areas at the time of accession.

TO FULLY DETERMINE YOUR ELIGIBILITY FOR THIS PROGRAM PLEASE CONTACT:

U.S. ARMY RESERVE HEALTH CARE TEAM 3606 Austin Peay, Suite 313, Memphis, TN

OR CALL COLLECT: (901) 388-9876 or 9877

Venereal Diseases: A Historical Perspective

ROBERT M. ZONE, M.D.

In this current time of the explosive growth of sexually transmitted diseases in Tennessee and the rest of our nation, it seems appropriate to look back 130 years to see how these problems were approached in Tennessee during the Civil War.

In 1870, the Government Printing Office "prepared, in accordance with Acts of Congress, under the direction of Surgeon General Joseph K. Barnes, United States Army, *The Medical and Surgical History of the War of the Rebellion (1861-65)*. This six volume set is one of the most detailed descriptions of that tragic conflict with statistical wound and disease presentations, clinical and case descriptions, and reports of physicians to their commands.

The following description shows in detail the efforts of the Army and its medical resources to control venereal disease in Nashville and Memphis. (During the years of the war for the Army of the United States there were over 63,000 cases of syphilis and 96,000 cases of gonorrhea.)

VENEREAL DISEASES

Systematized Efforts at Prevention.—Efforts were made at Nashville, and Memphis, Tenn., to suppress or limit the spread of these diseases among the troops, and, according to the testimony of the officers concerned, the results were highly satisfactory.

It appears from the records that Brigadier General R.S. Granger, in command at Nashville in June, 1863, was "daily and almost hourly beset" by the commanders of regiments and their surgeons to devise some way to rid the city of the diseased prostitutes infesting it. The matter was referred to the Provost Marshal, Lieut. Colonel George Spalding, 18th Mich., who by means of the police force and provost guard under his command, succeeded in placing on board a steamer which he had chartered all the women of the city publicly known to be of vile character. On July 8 the boat started for Louisville, Ky., but on arriving at that port the city authorities refused to receive the exiles. Cincinnati, Oh., also closed her doors against them. A few were taken

off at Newport, Ky., by writ of habeas corpus, and these soon found their way back to Nashville. Ultimately, in accordance with orders from Washington, the boat returned to her starting point, and on August 3 disembarked her passengers to resume their former modes of life.

Meanwhile, Colonel Spalding, recognizing the failure of his attempt to remove the women, suggested a system of licensed prostitution, with frequent inspection for the removal to hospital of those likely to disseminate disease:

1st. That a license be issued to each prostitute, a record of which shall be kept at this office, together with the number and street of her residence.

2nd. That one skillful surgeon be appointed as a Board of Examination, whose duty it shall be to examine personally, every week, each licensed prostitute, giving certification of soundness to those who are healthy and ordering into hospital those who are in the slightest degree diseased.

3rd. That a building suitable for a hospital for the invalids be taken for that purpose, and that a weekly tax of fifty cents be levied on each prostitute for the purpose of defraying the expenses of said hospital.

4th. That all public women found plying their vocation without license and certificate be at once arrested and incarcerated in the workhouse for a period of not less than thirty days.

The plan having been approved by General Granger, medical officers were detailed for duty in connection therewith, a hospital was established for the treatment of diseased women, and all prostitutes were required to present their certificates of inspection and procure a license before a given date, August 20. It was assumed that many diseased courtesans left the city on the publication of the order rather than be subjected to hospital treatment. Certain it is, however, that the number at first requiring medical attendance was small, the daily average of sick not exceeding 12. But in November, shortly after the passage of the 11th and 12th Corps through the city, 28 new cases were received. Up to January, 1864, the whole number examined, licensed, and registered was 300, of whom 60 were diseased. On April 30, 1864, the number was 352, and the number of cases treated in hospital 92; but some of these cases were recurrences, as they were represented by only 64 women. Twelve months after the institution of the system 456 white cyprians had been registered, and it is

Dr. Zone is the medical director of Equicor/Medicare Administration.

Reprint requests to Equicor/Medicare Administration, PO Box 1465,
Nashville, TN 37202 (Dr. Zone).

stated, in explanation of the rapid increase in the number, that many of the better class of prostitute had been drawn to Nashville from northern cities by the comparative protection from venereal diseases which its license system afforded. About this time the supervision was extended to colored prostitutes, 50 of whom had been registered. Of the whole number of women who reported for examination but four are said to have opposed the system.

Under these regulations a marked improvement was speedily noticed in the manner and appearance of the women. When the inspections were first enforced many were exceedingly filthy in their persons and apparel and obscene and coarse in their language, but this soon gave place to cleanliness and propriety.

The influence of this supervision on the health of the troops in the vicinity of the city is illustrated by Surgeon W.M. Chambers, U.S. Volunteers, who had charge of Hospital No. 15, which, in February, 1864, was converted into a hospital for venereal cases. According to his statement, up to June 30, 994 cases were admitted, and of this number 13 only had contracted the disease in Nashville. Surgeon R. Fletcher, U.S. Volunteers, in charge of the Female Venereal Hospital, in a letter dated August 15, spoke of the system in these terms:

It is not to be supposed that a system hastily devised, established for the first time on this continent, and certain to encounter all the obstacles that vicious interests or pious ignorance could put fourth, should be other than imperfect. We have no Parisian "Bureau des Moeurs," with its vigilant police, its careful scrutiny of the mode of conduct of houses of prostitution, and its general care of the public welfare both morally and in its sanitary consideration. This much, however, is to be claimed, that after the attempt to reduce disease by the forcible expulsion of the prostitutes had, as it always has, utterly failed, the more philosophic plan of recognizing and controlling an ineradicable evil has met with undoubted success.

Among the difficulties to be overcome was the opposition of the public women. This has so effectually disappeared that I believe they are now earnest advocates of a system which protects their health and delivers them from the extortion of quacks and charlatans. They gladly exhibit to their visitors the "certificate" when it is asked for, a demand, I am informed, not unfrequently made. The majority of the patients in the hospital are not sent from the inspection room, but consist of women who, suspecting their malady, have voluntarily come for examinations and treatment.

That a vast amount of veneral disease still exists in this army is incontestable, but from careful inquiries made of the men, when opportunity served, and from the reports of surgeons of regiments, the origin of the evil has been but to a small extent traceable to this city. When a soldier of the post forces is infected it is not uncommon for his captain to report the case, with the name of the suspected woman, who is immediately arrested and examined.

About a year after the inception of preventive measures at Nashville, Tenn., L.L. Coxe, an inspector or agent of the U.S. Sanitary Commission, submitted to General C.C. Washburne, commanding of the Department of West Tennessee, a series of rules and regulations for the government of prostitutes residing in the

city of Memphis. These were of a more elaborate and detailed character than those on which the Nashville system was based. The action taken by General Washburne does not appear on the record; but it seems that the regulation of the evil was under consideration in Memphis itself at the time, as on August 2, about three weeks subsequent to the date of Dr. Coxe's communication, the provisional council of the city adopted a resolution authorizing the mayor, in connection with the military authorities, to make and enforce necessary and proper rules to control and mitigate the evils of prostitution within the limits of the city. In pursuance of this resolution Lieut. Colonel T.H. Harris, Assistant Adjutant General, 16th Army Corps, on duty as mayor of the city, sent Dr. Coxe to Nashville to investigate the operation of the system in force at that station. A favorable report was submitted on August 26, and on the same day the Commanding General of the Department directed Colonel Harris to make the necessary arrangements on behalf of the military authority. This officer, now representing both the military and civil authorities of the city, communicated his purpose to the Adjutant General's Office, Washington, D.C., on August 31. His views were approved by Assistant Surgeon General R.C. Wood and Surgeon General Barnes, and he was authorized to call upon Surgeon B.J.D. Irwin, U.S. Army, Superintendent of Hospitals, for the detail of two medical officers to make the weekly examinations. Meanwhile, arrangements had been made for the reception of diseased women into the city hospital, and on September 30 the system was instituted by the opening of a registry office and the promulgation of the following order among the women concerned:

PRIVATE CIRCULAR CITY MEDICAL INSPECTION DEPARTMENT MAYOR'S OFFICE, MEMPHIS, TENN. September 30, 1864

All women of the town, in the city of Memphis and vicinity, whether living in boarding-houses, singly or as kept mistresses, are notified that they must hereafter be registered and take out weekly certificates.

Women who can show that they are living privately with a responsible citizen of good character will be exempted from the weekly medical inspection by calling weekly, between 2 and 5 o'clock P.M., at the Mayor's office, and paying the regular hospital fee. No one residing in a boarding-house will be registered as a KEPT woman.

All other than such kept women, whether practicing prostitution regularly or occasionally, are ordered to call on the City Medical Inspectors at the private office, second story over the confectionery store on the corner of Main and Union streets, entrance through the store, or at No. 21 Union street, on any afternoon between 2 and 4 o'clock before the 10th of October, and receive a medical certificate, for which two dollars and fifty cents will be charged.

Or women can receive the medical certificate at their homes by requesting the Medical Inspector to visit them, and paying one dollar extra for the visit. A note directed to lockbox 21, post-office, giving the street and number, will be attended to.

On receiving the medical certificate a ticket of registry

must be called for personally at the Mayor's office, for which ten dollars will be charged.

The money received goes to the support of the female wards in the new City Hospital, on the corner of Exchange street and Front Row, into which registered women are admitted at any time for any disease upon showing their weekly certificate, are afforded all the privacy and comfort of a home, and nursed by an experienced matron and female nurses free from any cost or charge whatever.

"Street walking," soliciting, stopping or talking with men on the streets; buggy or horseback riding for pleasure through the city in daylight; wearing of showy, flashy, or immodest dress in public; any language or conduct in public which attracts attention; visiting the public squares, the New Memphis theatre, or other resorts of LADIES, are prohibited and forbidden.

Good conduct will ensure relief from detective or police visits, exposure or loss, and a violation of the orders will inevitably incur punishment.

Any woman of the town, public or private, found in the city or vicinity after the 10th day of October 1864, without her certificate of registry and medical exemption certificate, will be arrested by the police and punished.

This circular is intended for the information of women only, and must not be shown or given to men.

By order of the Mayor: JOHN B. GRAY
City Medical Insp. Dep't.

The result is shown in the following report of Provisional Mayor, Mr. Channing Richards, rendered Feb. 11, 1865, a short time before the system was discontinued. As this officer evidently disliked his connection with licensed prostitution, and endeavored to relieve the civil authority from all responsibility in its inauguration, his testimony to its successful operation is all the more valuable:

In accordance with orders of Feb. 9, 1865, I have the honor to submit the following report, as called for, in relation to the City Medical Inspection Department:

The failure of all efforts made by the military authorities to suppress the vice of prostitution in the city induced the said authorities to introduce a system of registration. On the 31st of August, 1864, the Commanding Office of the District of West Tennessee, by Special Order No. 129, Ex. IV, entrusted the matter to the control of Lieut. Colonel Harris, the acting mayor of the city, who was instructed to make the necessary arrangements.

The first requisite was proper hospital accommodations, and as the city was then preparing a new hospital, arrangements were made for the reception of diseased women into that institution.

The registry was opened on September 30, since which time 134 public women have been registered, of whom 110 are now in the city, to wit: 14 housekeepers, 4 kept mistresses and 92 boarders. The inmates of all public houses and all other white cyprians known to the department are registered. It is impossible to say how many have evaded the orders and eluded detection, but there is no reason to suppose that there is any considerable number.

The total receipts of the department to Feb. 1, 1865, are \$6,428.65; expenses during the same time, \$2,535.16; the balance of \$3,893.49 has been passed to the credit of the hospital fund

The city physician is charged with the medical inspection

of the women, for which he receives no compensation in addition to his salary from the city as city physician. The salaries paid to the employees of the department are as follows:

Per Month				
Registrar\$200.00				
Detective				
Hospital Assistant 50.00				
Assistant Physician (in addition to pay from the city as				
hospital steward)65.00				
Hospital Matron (in addition to pay from the city as				
hospital matron)				
Total				
The fees charged for examination are as follows:				
For examination at inspection room				
For examination at residence				

No portion of these fees is paid to the examining physician, nor does said physician receive any "special fees" or extra compensation of any kind for any services connected with the department.

The total number of admissions of diseased women into hospital to date through this agency is 34; the number now there is 10. It is impossible to give the expenses of the hospital department, because the women are treated in the city hospital with the city patients. That hospital was fitted up by direction of the Commanding General at the expense of \$50.000—the reception of these women was contemplated in the directions. The monthly expenses are about \$2,500. If a hospital were fitted up for the special accommodation of the women the expenses would be scarcely less than half that amount.

In conclusion, I desire to say that I have considered myself as acting for the military authorities in this matter, and that the city government as such has never been connected with it: neither myself nor others belonging to the department have any desire to retain that connection longer than is entirely satisfactory to the military authorities. The matter was originally entrusted to the mayor of the city because the city was prepared with necessary means of enforcing the orders; but if the United States Medical Department is now able to provide for the women found diseased, and desires to assume their examination and treatment, such an arrangement would to no one be more satisfactory than to the city physician and myself, for I need scarcely say that any connection with such a department is extremely unpleasant. But I shall certainly regret the abandonment of the system, for the result of my own observation has been decidedly favorable to it. During my connection with the Provost Marshal Department in this city I was cognizant of the efforts to suppress this vice and their utter failure. In contrasting the present system I see many advantages to recommend it, for while it does not encourage vice it prevents to a considerable extent its worst consequences.

For the successful operation of the system the credit is entirely due to Mr. J.C. Heazlett, who is charged with the registration, and to Dr. A. Gregg, the city physician, who conducts the medical examination and treatment of the women. For the system itself credit is due to Colonel Harris, who was acting mayor at its inception.

Conclusion. As physicians meet the frustrations of controlling the sexually transmitted disease explosion, they may find some comfort in the frustrations and ingenuity of their predecessors. This article does not suggest the solution of the 1860s is applicable to the 1990s.

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You Shouldn't Choose A Debt Collection Service The Same Way You Choose Your Plumber.

While you're thumbing through the yellow pages, your debtors are thumbing their noses at you.

It's time to get serious. And put I.C System to work for your business. I.C. System has been endorsed by over 1,100 trade and professional associations just like yours and has collected millions for members just like you.

Our methods are ethical and highly effective, our newly expanded range of

collection programs are the most technologically advanced in the country.

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I.C. SYSTEM

Report of the Committee on Legislation

CHARLES W. WHITE, M.D. Chairman

The Committee on Legislation has had a very busy year, dealing with the Tennessee General Assembly and the executive departments of state government as well as the United States Congress and other federal regulatory agencies.

In June 1990, the committee and other key contact physicians made the annual trip to Washington for the congressional breakfast and briefing from the AMA Washington office staff. Physicians representing each congressional district in the state made personal calls on their local congressmen and shared AMA's positions on various key federal legislative issues.

During the year the committee held a two-day meeting in Nashville in November to discuss issues looming on the horizon in the 97th General Assembly and held a meeting in February of 1991 to review legislation which had been introduced just prior to the bill filing deadline.

The current legislative session is in full swing, heading for a mid-May adjournment. TMA staff is at work pursuing both an extensive proactive legislative agenda as well as playing defense against a number of issues potentially harmful to medicine and its patients.

As in the past, we are facing a number of proposals from other health-related occupational groups which are not in the best interest of patients. The most immediate and viable threat has been presented by the Tennessee Chiropractic Association. Chiropractors have been extremely active, working in concert with the organized labor movement, to enact legislation increasing chiropractic access to workers' compensation patients. This year's legislation would expand the current "threedoctor panel" to include any health care provider who is a participant in the Blue Cross State PPO, the Tennessee Provider Network. In this form, the legislation manages to effectively repeal the "three-doctor panel," business' principal method of controlling cost in the workers' compensation system, and add chiropractors as well as other limited scope practitioners to the panel in every workers' compensation case. This would be true because chiropractors, optometrists, and others are participants in the Tennessee Provider Network.

This chiropractic legislation has cleared the labordominated House Employee and Consumer Affairs Committee and is awaiting scheduling in the House Calendar and Rules Committee. TMA, working closely with business lobbyists, apparently has the votes to prevent the bill from being scheduled for House floor vote. Chiropractors and organized labor are working to change several votes in the House Committee and the outcome for the legislation is uncertain at this writing. On the Senate side, the companion Senate bill is still in the Senate Commerce and Labor Committee. There, business and medicine are likely to have a better chance of keeping the bill from reaching the Senate floor, although again, the outcome is by no means certain.

Several other allied health care groups are pursuing legislation to expand their scope of practice. Physicians' assistants have introduced legislation allowing PAs to prescribe drugs under the supervision of a licensed physician. Although mindful of the close and usually cooperative working relationship between physicians and PAs, the Legislative Committee has adopted a position against such legislation because of the relatively limited training possessed by PAs. In the face of this opposition, PAs have put their legislation on the back burner, at least for the remainder of this session. Physical therapists have returned to the legislature for the first time in several years to actively seek enactment of legislation allowing them to practice independent of physician referral.

Under the current compromise legislation adopted in 1987, PTs may perform an initial evaluation and screening of a patient, but may not initiate physical therapy services or treatment on a patient until or unless the patient has been referred back to the PT by a licensed physician who has determined that physical therapy services are appropriate for the particular circumstance involved. PTs would like to free themselves from this referral requirement and set up freestanding clinics to offer their services to the public. TMA contends that PTs are inadequately trained in diagnoses and are unable in many cases to distinguish between conditions which are amenable to physical therapy treatment and other medical conditions. This problem is exacerbated by the fact that PTs do not have access to x-rays or other diagnostic equipment, nor are they adequately trained in the interpretation of such tests. The independent practice legislation is pending in the General Welfare Committees of both Houses and may well have

This report was submitted to the Tennessee Medical Association House of Delegates, April 11, 1991, Memphis.

been voted on by the time this report reaches the House of Delegates. Again, the outcome on this legislation is uncertain. PTs are mounting a spirited lobbying campaign on behalf of their bill.

Funding alternatives for the increasingly deficit-ridden Tennessee Comprehensive Health Insurance Pool (TCHIP) continue to be a legislative priority. In 1990, efforts were made toward the end of the session to impose a license assessment on MDs to help pay an expected shortage in the TCHIP program. Physician opposition doomed the effort in 1990, but the issue resurfaced in 1991. The 1991 legislation called for a \$250 per year assessment on all licensed physicians in Tennessee to assist with the expected multi-million dollar shortfall in the TCHIP program. Sufficient MD opposition early in the session caused the legislation to be placed on the back burner where it remains at the present time. Actuarial data from the TCHIP program indicates that it will survive one more year without major restructuring of its funding sources. It appears, therefore, that there will not be a serious effort in the 1991 session to revive the physician assessment legislation. We do, however, expect to see the issue return in 1992 when new sources of funding will be absolutely crucial if the program is to continue in operation.

A major defensive priority for the Association in the current session has been defeat or deferral of legislation sponsored by major components of the business community that would establish a medical fee schedule and other medical cost review mechanisms within the workers' compensation program. The medical cost control aspects of the business community's workers' compensation legislation are contained within a much larger bill that seeks to restructure the entire system of adjudicating workers' compensation claims in Tennessee. Presently, Tennessee has a court-based system for workers' compensation disputes. The business community believes that costs will be saved, primarily at the expense of trial lawyers, if this system can be converted to an arbitration based dispute resolution system. While TMA is certainly not opposed to making the change to a commission or arbitration system, we are seriously concerned about any effort to set statutory maximums for physician fees in the workers' compensation program. We have indicated to the business community, with whom we are normally in agreement on most issues, our willingness to discuss with them during the summer various initiatives which could control the growth in workers' compensation medical costs other than fixing physician fees by statute. It appears likely that the restructure legislation will be deferred until next year, largely because of opposition from both TMA and trial lawyers. During the summer and fall, we anticipate following through on our efforts to work with the business community to control rising medical costs in the workers' compensation treatment program.

Also, regarding workers' compensation, legislation has been introduced by certain business and labor interests to limit physician deposition charges in workers' compensation. TMA asserts that although there may be isolated instances of overcharging for time spent at depositions, by and large physician charges are in line with market rates for the time involved. It appears likely that legislation to limit such fees will die in the House Labor Committee and the Senate Commerce and Labor Committee.

TMA has again sought legislation to prohibit individuals who are not licensed medical doctors or osteopaths from holding themselves out to the public as physicians in Tennessee. As many of you are aware, the Yellow Pages in Tennessee lists chiropractors and podiatrists under the physician section. TMA objects strenuously to this incorrect and misleading representation on behalf of these groups who are in no respect qualified to hold themselves out to the public as physicians. These limited practitioners, especially the chiropractors, enjoy blurring the lines in the eyes of the public between themselves and traditional medical practitioners. This practice on the part of the Yellow Pages merely serves to confuse the public as to the role of these limited practitioners in the health care market. TMA anticipates reintroduction of this legislation next year and thereafter until it is adopted.

In summary, at this point in the legislative session, it appears that medicine has had a successful legislative year. Bear in mind, however, that at the time of preparation of this committee report, the session has four to six weeks yet to run before it adjourns. Certain issues discussed in this report will be resolved in the last several weeks. The outcome is by no means certain. Also, the waning days of the session are extremely dangerous and see many last-minute amendments and surprises. Constant vigilance on the part of TMA staff is the order of the day as the session winds down. Barring such catastrophes, the committee believes that this session has been a successful one for organized medicine.

Committee Members

Charles W. White, M.D., Chairman, Lexington James M. High, M.D., Madison Thurman L. Pedigo, M.D., McMinnville James C. Bradshaw Jr., M.D., Lebanon Allen S. Edmonson, M.D., Memphis James T. Craig Jr., M.D., Jackson David G. Gerkin, M.D., Knoxville Nat E. Hyder Jr., M.D., Johnson City James R. Royal, M.D., Chattanooga John B. Thomison, M.D., Ex-Officio, Nashville Richard T. Light, M.D., Ex-Officio, Nashville Ralph E. Wesley, M.D., Ex-Officio, Nashville Mrs. Carolyn Vann, TMA Auxiliary, Clarksville Mrs. Johnnie Amonette, TMA Auxiliary, Memphis

Report of the Committee on Governmental Medical Services

EUGENE W. FOWINKLE, M.D. Chairman

The Committee on Governmental Medical Services has had an especially active year. There were two meetings of the full committee, in addition to the staff dealing with many Medicare and Medicaid issues throughout the year.

A major function of this panel is to serve as a funnel for physician input on various Medicare reimbursement policy changes over which the local carrier has latitude. The current issues have been cardiac catherization and PTCAs, balloon dilation of prostate, organic disease oriented panels, postoperative pain management, radioallergosorbent testing, care of foot conditions, treatment of impotence, endoscopic cholecystectomies, lower limb prosthetics, total contact casts, and cardiac upright tilt tests. A multispecialty advisory panel has been created to expedite physician input in regard to such changes.

Passage of federal budget ended a year of mixed results for medicine. AMA was able to secure a number of positive reforms including adoption of four of five elements of AMA's "anti-hassle" amendments. Chief among these provisions was the repeal of the prohibition on the traditional practice of the attending physician billing for services provided by a covering colleague on an occasional, reciprocal basis.

Other major victories included a reduction from \$5.5 billion in overall Medicare budget cuts proposed by the administration to \$3.3 billion (\$1.4 billion for Part B). The 125% balance billing limit was moderated by raising the floor on prevailing rates from 50% to 60% and increasing the limits on "evaluation and management services" to 140%. Physicians will not be required to inform Medicare patients about living wills. Representative Pete Stark's proposals to require periodic recertification for physicians and to require states to institute triplicate prescription programs were defeated. The administration's proposal to assess physicians \$1 for each paper claim was not enacted, nor was a proposal to reimburse non-board certified physicians at 5% less.

This report was submitted to the Tennessee Medical Association House of Delegates, April 11, 1991, Memphis.

On the negative side, primary care services will receive only a 2% Medicare economic index update while no MEI update will be applied to non-primary care specialties this year. The 1992 MEI will be reduced by 0.4% below what would otherwise apply. Customary charge levels, except for new physicians, will be held at current levels for 1991. Despite the fact that the prevailing floor for primary care services will be increased from 50% to 60%, the adjusted historical payment basis will be based at 50% in transition to the full fee schedule. The Medicare volume performance standard for all physicians will be reduced by 2 percentage points in fiscal year 1991 and subject to further adjustments to reflect legislative changes. Other negatives include further reductions in "overpriced" procedures and limitations on payment for interpretations of ECGs.

Other Medicare-related topics included a revised fee schedule based on the elimination of specialty differentials, explanation of benefit letters for physicians who do not accept assignment, and payment for emergency room services, all discussed in July. At the last meeting, the committee received an update on the RBRVS, and discussed comparative performance reports, the release of dedicated contingency funds by HCFA, "Dear Doctor" letters, Uniform Physician Identification Numbers, and AMA's efforts to force the resignation of Inspector General Richard Kusserow. Additional cuts in the fiscal year 1992 budget have been considered.

In regard to Medicaid, OBRA 1990 included a provision to prohibit state Medicaid programs from employing restrictive formularies for companies which agree to offer states their best price. Prior approval programs will continue, though a 24-hour turnaround must be instituted by July 1.

TMA was partially successful in its attempts to remove the 20-day inpatient physician limit, as hospitals are now reimbursed for unlimited days. In November, in response to pressure from physicians, this limitation was dropped for patients under 21. For visits after the 20th day, reimbursement will be set at 60% of regular payment (hospitals receive 60% to their operating component after 20 days).

A major focus of the committee has been the

Medicaid budget. The McWherter administration, faced with declining sales tax revenues, has announced major cuts in Medicaid reimbursement. Although these have initially fallen primarily on hospitals, medical education programs have been seriously impacted.

Declining state revenue growth is compounded by the tremendous growth of the Medicaid program, due primarily to federally mandated eligibility increases. Medicaid is growing at approximately twice the rate of the rest of state government and cannot be fully funded, even with tax reform, according to administration officials. They insist that any increased funding will have to come from providers to enhance federal matching funds. Hospitals and nursing homes are now providing significant amounts of such funding through annual license fees and donated funds.

Other states, most notably Arkansas, Kentucky, and Alabama, are moving toward the enactment of a gross receipts tax on the state portion of Medicaid payments received by physicians. This revenue will be combined with federal matching funds to create significantly higher reimbursement levels. For example, Arkansas physicians expect to see Medicaid payments approaching Blue Cross rates with an overall increase in payment to MDs at 57%. However, significant concerns were expressed that state government, once provider contributions are in place, will not continue to fully fund its portion of the Medicaid budget. Despite these

reservations, the committee voted to urge the Board of Trustees to further investigate the Arkansas provider gross receipts tax concept and to assume a proactive rather than reactive stance.

The Board of Trustees has received numerous complaints from members about Medicare and other third-party payors imposing credentialling requirements for new procedures, such as endoscopic cholecystectomy. At the Board's direction, the committee developed a resolution which states that the policy of the TMA is that credentialling requirements should remain the exclusive province of hospital medical staffs and governing boards.

The committee wishes to thank Dr. Robert Zone of Medicare and Manny Martins of Medicaid for their cooperation and attendance at meetings.

Committee Members

Eugene W. Fowinkle, M.D., Chairman, Nashville Hays Mitchell, M.D., McDonald David K. Garriott, M.D., Kingsport Bergein F. Overholt, M.D., Knoxville Arden J. Butler Jr., M.D., Ripley William F. Fleet Jr., M.D., Goodlettsville Dee J. Canale, M.D., Memphis Robert W. Herring Jr., M.D., Nashville Oscar M. McCallum, M.D., Henderson Richard T. Light, M.D. Ex-Officio, Nashville

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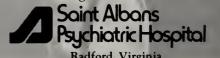
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president's page



HOWARD L. SALYER

Documenting the Right to Die

"Needless Medical Bills Worsen Grief" proclaims the headline in one of Ann Landers' June advice columns. She concludes by advising her millions of readers to write for a copy of the Harvard Medical Directive. Why? Because, in her words, "it provides legal support for your doctor to carry out your intentions." That, in an advisory nutshell, is the informed consent doctrine and all we have ever hoped to be able to do for our patients.

For the past few months, thanks to TMA, Tennesseans have not had to contact Harvard for advanced care directives. We mailed out the first edition of TMA's Health Care Power of Attorney Form to all members in February. As I write this column, an updated version is being sent to you along with the legislatively amended living will form. Patients simply can go to their friendly neighborhood physician for living wills and the new power of attorney form, which includes the best part of Harvard's form—the 48 choice treatment grid. It is our responsibility, not Ann Landers', to educate the public. Having these forms in our offices gives each of us an incredible opportunity to teach our patients about their future medical treatment choices.

In retrospect, Tennessee has come a long way since TMA's Legislative Committee helped draft the state's Right to Natural Death Act, which, in 1985, created the living will for general use. Just last year, the General Assembly passed the Act creating the durable power of attorney for health care, upon which our own form is based. More importantly, they also created a Right to Natural Death Task Force under the auspices of the Board for Licensing Health Care Facilities. The task force was charged with drafting regulations for health care facilities concerning the withholding or withdrawing of resuscitative services for patients who have no advanced directive, and for whom further treatment would be medically futile.

We have needed such regulations and protocols in place ever since Karen Ann Quinlan's family had to seek a court's assistance to stop futile medical treatment provided only in the interests of poorly articulated state policy. The year 1990 also provided us with the latest example of such state attorney general intervention with the prolonging of Nancy Cruzan's vegetative existence for an extra eight years. Long gone are the days when pneumonia would mercifully end such struggles.

It has long been TMA policy, as cogently expressed by our House of Delegates, to "oppose any legislation that would put laws, courts, and judges in a position of making life and death decisions." We now have the necessary documents available and laws in place that will, for the most part, keep the judiciary out of this set of most personal and theological decisions that our patients need to make. Let us all now teach our patients to decide about their future medical treatment. If we abrogate our ethical responsibility in this patient care arena, we will only be inviting the court system back into where it never belonged in the first place.

Hal h Salyer 4.0.

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SEPTEMBER, 1991

editorials

Progress Notes

As you peruse the contents or the table of contents or do whatever else you do to find out what is between the covers of this book, assuming you care, as I hope you do, I invite you to interrupt your wanderings at the page that bears the same title as this piece, and pay attention to that new, and I hope permanent,

section in the *Journal*. How came it here? Just stick with me, as I aim to fill you in.

Predictions are a chancy thing, even when the outcome appears assured; in addition, expectations often change along the way, further complicating an already complex situation. As an added complication, when the status quo is challenged people are always lining up on both sides of the aisle to defend their pet position. The outcome from any given situation is almost never either the inspiring bonanza or the dire calamity predicted by one or another group; it is more often one that everyone can live with, even if not altogether happily on all fronts. Over the long haul, the humps and dips pretty well iron themselves out, and the sailing becomes smoother, if not serene.

Twenty or so years ago, with the country involved in a widely unpopular military action, the nation's disaffected youth, with their own counterculture, were making of themselves what most of their elders regarded as a nuisance. One of the most notable foci of disruption was the AMA conventions. The medical students and residents, who had their own section, but who found their voice ineffectual, were demanding more of a role in charting and guiding the course of organized medicine.

Despite choruses of consternation and doom, the rejuvenated sections of the resident physicians and the students were given a seat in the House of Delegates. As they continued to demonstrate their dedication to and ability for responsible action, they were given first seats on the various councils, and finally on the Board of Trustees. They have served medicine, which is you, me, themselves, and our colleagues, well; even more importantly, they are assuring the future and the vitality of the Federation, because they *are* the future of the Federation.

Change occurs slowly. Students from Tennessee's medical schools have been leaders in the AMA's student section, but their participation locally has been lacking, first because the necessary changes in the Constitution take a year or more to accomplish, and once that was done, the newly formed section had to be organized. Now that the TMA's Medical Student Section has gotten under way, its leaders have asked for a page in the *Journal* each month to keep the section before the students and draw them into organized medicine.

Though the page will serve as a forum directed primarily toward the students themselves, I should think their interests would also be your interests, considering that they soon will be your younger colleagues, and so I commend their forum to your attention.

J.B.T.

Lost Causes

Of all the lost causes I can think of, the lostest (and please don't tell me "lostest" can't be a word) appears to me to be the preservation of the Constitution of the United States. I am pretty sure that very few people know at this point what its pristine state was like, even though the words may be the same. I'll get to that in a minute. The Constitution has been picked at since day one, and by day one I mean the first day not of its existence but of the Constitutional Convention that sired it. It's a wonder to me it could ever have been written, considering all the existing circumstances, and then, once it was written, ever signed and ratified; but it was, though 'twarn't easy. Clinton Rossiter has called the Constitution a bundle of compromises and a mosaic of second choices, and Benjamin Franklin, the conscience of the convention, said of that body, "I doubt ... whether any other convention we can obtain may be able to make a better constitution . . . Thus I consent . . . to this convention because I expect no better and because I am not sure it is not the best." William Gladstone, prime minister of Great Britain on four occasions between 1868 and 1894, said of the finished product that it was "the most wonderful work ever struck off at a given time by the brain and purpose of man."

I don't intend this to be a history lesson. In case you're interested, you can look up the details as well as I can. It is my distinct recollection, though, that both the conception and the inception of the Constitution of the United States were marked by animosities and quarrels that on occasion stopped just short of the mortal spilling of blood. The violence done the Constitution itself began with its ratification and has continued right up to now. It sometimes seems as if its only protectors are the guards who stand watch over the physical document.

Rossiter calls the language of the Constitution both precise and vague, "which though contradictory may be the secret of its long life." Henry Clay said of the Constitution that it was "made not merely for the generation that then existed. but for posterity—unlimited, undefined, endless, perpetual posterity." Well aware of that, the founding fathers left open certain phrases for future interpretation. That was, I suspect, the marvel that Mr. Gladstone detected; and that's where the rub is.

The constitutionally delegated responsibility for maintaining the integrity of the Constitution of the United States rests with the United States Supreme Court. As I have watched that body function in the 50 years or so since I spent about a month studying the Constitution in an American History course, I

have decided that to have placed the Constitution under the care of the Supreme Court was more or less analogous to having the fox watch the chicken house. Mr. Chief Justice Charles Evans Hughes, who was chief justice when Franklin Roosevelt first came to call the White House home, and remained so until 1941, commented, "We are under a constitution, but the constitution is what the judges say it is." And so it was, is, and always shall be. In his first Inaugural Address in 1933, President Roosevelt allowed that, "Our Constitution is so simple and practical that it is always possible to meet extraordinary needs by changes in emphasis and arrangement without loss of essential form. That is why our constitutional system has proved itself the most superbly enduring mechanism the modern world has ever produced.' He used that to full advantage, but he was neither the first nor the last to do so. Whether a president is packing the Court or not with his appointments depends, I have perceived, on the side of the fence one occupies.

I am skeptical, therefore, of the Supreme Court's qualifications to be the keeper of the keys to the Constitution. Meddling with the Constitution began not with Chief Justice Hughes' Court, nor with the Warren Court, as some would have it (sometimes, I must confess, including me), but with John Jay, the first chief justice, and it ain't changed since. At the same time, to be fair, I can't right offhand think of a better or more appropriate guardian. Would you have it be, for instance, the Congress of the United States? Perish the thought! At least the justices have no constituency, and therefore need fear no political consequences in rendering their decisions.

A case in point can be constructed without much difficulty from this morning's Wall Street Journal as it reports the various mouthings over the nomination of Judge Clarence Thomas to fill the vacancy left on the Court by the rather precipitate retirement of Justice Thurgood Marshall. Judge Thomas grew up poor and black in Savannah, Ga., the grandson of a sharecropper, and. I should think, necessarily the great-grandson of slaves, though I haven't seen that mentioned. He never believed that he could get ahead by any means other than his own efforts, and so that is how it is said he did it, though that has been disputed by his critics. Furthermore, that is how he believes everyone should do it, without placing any reliance on government for help. And that is what worries many, even most, other blacks and all liberals, who believe that all succor must come from the banks of the Potomac. Judge Thomas has, in addition, attacked the very foundations of affirmative action, and has even had the temerity to question the

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decision on which school desegregation is based. His background and his conservative views have thus placed the liberals in a gross bind, squarely between the rock and the hard place, since on most other grounds he should be their darling.

Governor Wilder of Virginia, the nation's highest elected black public official, worries, he says, about the religion of Judge Thomas, who is a devout Roman Catholic. How much allegiance, Gov. Wilder wonders, would Justice Thomas have to the Pope? Like most public statements, this one needs to be translated into the vernacular. It comes over as: how would Justice Thomas stand on the matter of abortion? Forget the Pope.

Business, too, finds Judge Thomas hard to figure. Though he is very conservative by most criteria, business lobbyists worry that Justice Thomas might not back business in the deliberations of the Court. Like everybody else, business insists on having it both ways.

Gone begging in all of this is the venerable Constitution of the United States. Judge Robert Borke was adjudged by the Senate to be unacceptable as Justice Borke. I got the impression that was because he was a strict constructionist where the Constitution was concerned. Strictly construed, there are areas in which the Constitution could prove at best disquieting to the liberal philosophy. Though it is possible I might only have missed it, this time I haven't seen the Constitution mentioned at all in reservations about Judge Thomas' qualifications. It's as if the Constitution weren't important to the decision so long as liberal philosophy is not offended. The problem the liberals are facing is in deciding how much it will take to offend that philosophy gravely enough to disqualify a poor black from Savannah. I should judge the offense would have to be greater by several orders of magnitude for Judge Thomas than for Judge Borke. We shall see.

What is it, with all this worrying I have been describing, that I worry about? What it is I worry about is the machinations of all these folks who since 1789 have wanted to redo the Constitution every time something arises that doesn't suit them. The Supreme Court alone has the opportunity to do that every day with facility, and so they do. They seem to think—always have seemed to think—that's what they were hired for. As Mr. Chief Justice Hughes said, the Constitution is what the judges say it is. To its credit, the present Court has to a considerable extent curtailed the propensity for diddling with the Constitution that quickly reached its zenith under Chief Justice Earl Warren and then hung there until the last year or so.

And all those other folks—the Senate, business and its lobbyists, the NAACP, the pro- and anti-abortionists, and so on? Well, they don't mind having the Constitution tampered with, and even foment such goings on, so long as the tampering suits their own purposes. As I contemplate the situation on this the 215th anniversary of the signing of our Declaration of Independence, and in the 200th year after that first diddling with our Constitution, the Bill of Rights, which happened when the Constitution was only two years old, and which, incidentally, I'm not knocking, all of those other watchers of the chicken house look awfully predatory to me. Nothing is perfect, and considering the alternatives, the Supreme Court seems for the present and the foreseeable future the only proper guardian for our Constitution.

But having said that, I have to add a prayer that God help us to resist the temptation ever to call another Constitutional Convention, a notion that surfaces periodically. Despite their faults, the framers of our Constitution were for the most part men of clear vision. While there are a lot of individuals on either side of both the literal and figurative aisles who consider themselves of sufficient vision to guide us through those shoals, most of what they show us daily is that the glass they see through is frighteningly dark. Just occasional tampering is bad enough.

J.B.T.

Guilty as Charged?

She's guiltier than I am of whatever it is she's accusing me of. . . .

—Phil BredesenMayoral candidate

Remember the old musical hit, sung, as I recall, by Ethel Merman, that goes, "Anything you can do/I can do better;/I can do anything better than you"? Which is, of course, just an extension of, "My dad can lick your dad," and so on. The ultimate "and so on," by courtesy of the current Nashville mayoral election campaign, appears above.

This is neither an indictment of nor an apology for either of the two candidates involved in the implied exchange, and in fact I don't even know what it was Mrs. Nixon, the other candidate, had been accusing Mr. Bredesen of (it sounds as if Mr. Bredesen might not have been quite sure, either). In any case, for purposes of this editorial it doesn't matter, though in another context it almost certainly would. I simply thought the comment too marvelous to ignore, and

one that could be used in a wide variety of situations. Without being either so simply or so elegantly stated, and even more frequently implied than stated at all, it most assuredly has been, and also is being, so used—every day, and in almost every way, somewhere, by somebody, or better, somebodies. It is, in fact, the universal cop-out.

For something that according to a well-worn maxim is supposed to be odious, comparisons get a real workout. Before the term came to have a pejorative connotation, discrimination was considered necessary to the choosing of such disparate things as a cantaloupe or a mate (although admittedly little discrimination is all too frequently employed in either situation. In the one case the meal is disappointing, and in the other the marriage is; both might get thrown out). Comparisons make possible such things as horse races, political races, beauty pageants, Oscar awards, and admissions to medical school.

In most areas of life, fairness dictates that the playing field be level; in such things as war and the political arena the players do everything possible to assure that it will not be. Life makes no pretense at fairness, and furnishes no playing field at all to speak of; in general, what you see is what you get, though you can rest assured you will get a lot of things you don't see, as well. So far as picking winners is concerned, then, comparisons always need to take into account the subject's agility in dodging the stumps and potholes along the way.

When it comes to morals, though, comparisons are allowed only with the perfect. There is no such thing as being more guilty or less guilty; like being pregnant, one either is or is not guilty. This can be hard on the psyche of anyone who tends to be guilt-ridden. To alleviate, or at least attempt to alleviate, this strain on the ego, the existentialists abandoned the notion of moral absolutes, and made moral judgments subject to the context in which they appeared. In such a context, as an example, using campaign funds for things other than the campaign becomes something other than stealing, sleeping with another's wedded mate becomes not adultery if the players (the word is used deliberately) are "really in love," and so on. That way just about anything can be justified on some grounds or other, and it relieves the delinquent of seeking forgiveness from either God or his fellow man, speaking generically.

As I said earlier, so that I would not have to pass judgment I deliberately avoided learning what questionable act our candidates are alleged to have committed. Whatever it was, they are either guilty or not guilty, neither more nor less. I have to add, though, that that is just my view, and I likely will be judged

out of contact with the times, since many of the things I hold to be right and proper are coming under attack and falling by the wayside. What's worse, I sometimes get the feeling I am in some way abetting their downfall.

Tennyson has his dying King Arthur say from the barge, "The old order changeth, yielding place to new, and God fulfills himself in many ways." Don't look now, but I think that is not God I see coming down the pike.

J.B.T.

personal news

Jonathan S. Cohen, M.D., Chattanooga, has been certified as a Diplomate in general psychiatry by the American Board of Psychiatry and Neurology.

James H. Whitehurst, M.D., Knoxville, has been certified as a Diplomate in radiation oncology by the American Board of Radiology.

new members

The *Journal* takes this opportunity to welcome these new members to the Tennessee Medical Association.

BEDFORD COUNTY MEDICAL SOCIETY *Bruce Martin Gipson, M.D.*, Shelbyville

DICKSON COUNTY MEDICAL SOCIETY John C. W. Morse, M.D., Dickson

GILES COUNTY MEDICAL SOCIETY Jon M. Owings, M.D., Pulaski

KNOXVILLE ACADEMY OF MEDICINE William J. Minteer, M.D., Knoxville John F. Vannoy, M.D., Knoxville

MAURY COUNTY MEDICAL SOCIETY Randall L. Davidson, M.D., Columbia

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Milton Brent Addington, M.D., Memphis Michael John Baron, M.D., Memphis Allen D. Berry III, M.D., Germantown Richard E. Blackburn, M.D., Memphis

Arnold D. Bridges, M.D., Memphis Alan Jay Cohen, M.D., Memphis Dale Preston Cunningham, M.D., Germantown Philip Marvin Furr, M.D., Memphis Mohandas S. Karkera, M.D., Memphis John Edward Linn, M.D., Memphis Catherine J. Oster, M.D., Cordova Paul Edward Perryman, M.D., Memphis Barbara Lynn Phillips, M.D., Memphis Linda M. Smiley, M.D., Memphis Robert William Wake, M.D., Memphis Joseph Seth Weinstein, M.D., Memphis

NASHVILLE ACADEMY OF MEDICINE

Roy Perry Burch Jr., M.D., Brentwood Andrew Lawson Chern, M.D., Nashville Janet E. Evans, M.D., Madison Mark Lanier Johnson, M.D., Madison F. Greg King, M.D., Nashville

(Student)

Oct. 19-24

H. Kendle Yates, Nashville

SUMNER COUNTY MEDICAL SOCIETY Albert M. Handal, M.D., Portland

TMA Members Receive AMA Physician's Recognition Award

The following TMA members qualified for the AMA Physician's Recognition Award during June 1991. This list, supplied by the AMA, does not include members who reside in other states.

Physicians can receive the PRA certificate valid for one, two, or three years. For the one-year award, physicians report 50 hours of continuing medical education, including 20 hours of Category 1; for the two-year award, physicians report 100 hours of CME, including 40 hours of Category 1; for the three-year award, physicians report 150 hours of CME, 60 of which are Category 1.

Benjamin L. Beatus Jr., M.D., Memphis Robert E. Bowers, M.D., Chattanooga William D. Brackett, M.D., Chattanooga Brian R. Carlson, M.D., Mount Juliet Curtis B. Clark, M.D., Jackson Billy L. Couch, M.D., Humboldt Richard J. Davis, M.D., Nashville David B. Dodson, M.D., Chattanooga David N. Dyer, M.D., Nashville Mark E. Edenfield, M.D., Kingsport John N. Galbraith, M.D., Chattanooga James W. Garner Jr., M.D., Murfreesboro Thomas G. Grabenstein, M.D., Clarksville John B. Hackworth Jr., M.D., South Pittsburg Janet K. Johnson, M.D., Cordova Thomas B. Jones, M.D., Nashville Paul King, M.D., Memphis Frederick K. Kirchner Jr., M.D., Nashville George S. Lovejoy, M.D., Memphis Russell W. Mayfield, M.D., Bells Edward T. McNeeley, M.D., Norris Don G. Mills, M.D., Chattanooga James H. Ragsdale, M.D., Union City Henry W. Scott Jr., M.D., Nashville Dillard M. Sholes Jr., M.D., Johnson City E. Dewey Thomas, M.D., Nashville David T. Watson, M.D., Knoxville W. Hall Worthington, M.D., Knoxville

announcement/

	CALENDAR OF MEETINGS
	NATIONAL
Oct. 2-5	American Society for Surgery of the Hand—Orlando
Oct. 2-5	Cystic Fibrosis Foundation—Loews Anatole Hotel, Dallas
Oct. 3-5	Child Neurology Society—Hilton, Portland, Ore.
Oct. 3-6	American Academy of Pediatrics (Georgia Chapter)—Doubletree Hotel, Atlanta
Oct. 6-11	American College of Angiology—Westin Maui, Hawaii
Oct. 8-13	Society for Clinical and Experimental Hypnosis—Clarion, New Orleans
Oct. 7-10	American College of Emergency Physicians—Marriott Copley Place, Boston
Oct. 9-12	American Academy for Cerebral Palsy and Developmental Medicine—Galt House, Louisville
Oct. 9-13	American Society of Internal Medicine— J.W. Marriott, Washington, D.C.
Oct. 10-12	Central Association of Obstetricians and Gynecologists—The Broadmoor, Colorado Springs, Colo.
Oct. 10-13	American Lithotripsy Society—Walt Disney World Dolphin Hotel, Orlando
Oct. 11-14	American College of Nutrition—Holiday Inn Surfside, Clearwater Beach, Fla.
Oct. 13-17	American Academy of Ophthalmology—Anaheim, Calif.
Oct. 14-16	American College of Clinical Pharmacology—Colony Square, Atlanta
Oct. 16-20	American Academy of Child and Adolescent Psychiatry—Hilton, San Francisco
Oct. 16-20	Association of Reproductive Health Professionals—Grand Hyatt, Washington, D.C.
Oct. 17-19	Association of American Physicians and Surgeons—Griffin Gate Marriott, Lexington, Ky.
Oct. 17-20	Academy of Psychosomatic Medicine—Marriott Marquis, Atlanta
Oct. 17-20	American Academy of Psychiatry and the Law—Hilton Walt Disney World, Orlando
oct. 19-21	Central Neuropsychiatric Association—

American Fertility Society-Marriott's Or-



OWNED AND PUBLISHED BY THE ASSOCIATION

OCTOBER, 1991 VOL. 84, NO. 10

Dedication Ceremony Tennessee Medical Association Headquarters July 13, 1991 11:00 a.m.

Schedule of Events

Welcome Dr. John R. Nelson, Chairman

TMA Board of Trustees

Invocation Dr. John Burkhart, Knoxville

Introductions Past Presidents

Officers and Board Members Auxiliary Officers and Board

Building Committee

Brief History of TMA Headquarters Facilities

and Staff

L. Hadley Williams, Executive Director Tennessee Medical Association

Dedication Address

Dr. James S. Todd, Executive Vice President

American Medical Association

Chicago, Illinois

President's Remarks

Dr. Howard L. Salyer, President Tennessee Medical Association

Ceremonial Ribbon Cutting

Open House and Reception



Invocation

Almighty God, maker of all things, living and inanimate, we are here today in this place in your presence, to invoke your blessing on the dedication of a new home for an honorable and venerable profession. We rejoice in the completion of this beautiful and functional building, to be used by the Tennessee Medical Association and other related organizations, to further the purposes for which the calling of medicine exists, the provision of the best possible healthgiving care and services to those who need, seek, and deserve such attention and consideration.

Bless, we pray, those who have made this building possible, and remind those who will utilize it that it is to be used to serve those who serve you by serving others with the skill, care, and compassion that is the essential hallmark of a healing and ministering profession.

We would, today, dedicate this lovely edifice to the larger benefit of mankind and to the greater glory of his creator. We pray that this solemn but happy event will be pleasing in your sight, and that your Holy Spirit will guide our hands and hearts, one and all, as we seek constantly to merit your favor. For it is in your Holy name that we pray. Amen.

—John H. Burkhart, M.D.

Welcome



John R. Nelson Jr., M.D. Chairman TMA Board of Trustees

(Dr. Nelson recognized Tom Nesbitt, M.D., past president of AMA, and he recognized the past presidents of TMA in attendance. He then introduced the president-elect of TMA, Charles Ed Allen, M.D., and recognized the officers and members of the TMA Board of Trustees.)

This magnificent building that you see is the new home of the TMA, but it is also the new home of another organization, the TMA Auxiliary. This is the first time that the Auxiliary has had a permanent headquarters, and we are happy to share our new home with them. Mrs. Dana Banks is president of the

Auxiliary; she is here, and I should like for her to stand, along with the members of the Auxiliary board and their officers, please.

The members of the Building Committee deserve special recognition. It was to this group that the Board gave the responsibility and authority for the planning and execution of this building. This committee consisted of five members of the Board, and I should like to individually recognize them and ask them to stand please. Dr. Bill Miller of Knoxville, Dr. Jim Craig of Jackson, Dr. Hamel Eason of Memphis, Dr. John Thomison of Nashville, and Dr. Howard Salyer of Nashville.

The TMA is 161 years old. It was established in 1830 by an act of the Tennessee General Assembly, 17 years before the AMA existed. We have had a long and varied history. For the first 97 years the TMA was operated entirely by volunteer physicians. It was not until 1927 that the first paid staff employee was hired. Since that time the membership, the staff, and the facilities have grown. To tell us a bit about the history of the TMA, no one is better qualified than our executive director, Mr. Hadley Williams. Hadley has been with the TMA now almost 30 years. He has distinguished himself not only in Tennessee but in the national medical society executive organizations.

Brief History of the TMA Headquarters Facilities and Staff



L. Hadley Williams Executive Director Tennessee Medical Association

TMA's first headquarters office was situated in downtown Nashville at the corner of 7th & Church Street in a building appropriately named The Doctors Building. The first individual who was paid to oversee the affairs of TMA, known then as the Tennessee State Medical Association, was Dr. Harrison Shoulders. Dr. Shoulders served TMA part-time as secretary-editor from 1927 until he resigned in 1945 to accept the presidency of the American Medical Association. The first full-time TMA employee was Miss Willard Batey, whom Dr. Shoulders employed in 1927. Now Miss Batey did it all. She kept the books, the records, and the finances; she wrote the checks, she maintained all the membership data, and she conducted all the necessary administrative needs for the secretary-editor. Miss Batey never married but she had a way of knowing about every doctor who was, those who weren't, and those who sometimes forgot they were. In other words, Miss Batey kept up with everything—and everybody. I knew Miss Batey from 1963 until her reluctant "retirement" in July of 1967, after only 40 years of service at TMA.

Dr. Shoulders' assistant was Dr. W.M. Hardy, who succeeded him in 1945 and served as secretaryeditor until 1949. The first full-time paid layman to head TMA was V.O. Foster, who served as assistant secretary under Dr. Hardy from 1946 to 1950, when he became the first TMA executive director. He resigned in 1954 to become CEO for the Southern Medical Association, headquartered in Birmingham. Mr. Jack Ballentine, then the executive director for the Nashville Academy of Medicine, was tapped by TMA in 1954 to become the second full-time CEO. The downtown office was abandoned when the Board of Trustees purchased a lot at the corner of Hayes Street and Louise Avenue, in the heart of the doctor/hospital medical community, and constructed the first headquarters building facility, which was completed in January of 1956 at a cost of \$37,000. After adding a conference room and a small kitchen

in 1959, the property next door was purchased and the building size was doubled in 1971 with the addition of approximately 3,000 square feet of office space. This expanded facility served TMA well until March of this year, after some 20 years.

Let me regress for just a bit to recall the employment of the second full-time executive, which occurred in 1950 when the Board and the House of Delegates decided to create the position of public service director, whose responsibilities would be to manage and conduct public relations activities statewide and to implement a PR program known then as the Tennessee Ten. Today, over 40 years later, the CARE program is being implemented with many of the same objectives.

The newly created office and position was answerable directly to the House of Delegates, and it operated with a budget appropriated separately, and aside from that of the executive director. Mr. Ed Bridges was named public service director in 1950 and served in that position until 1955, when he was replaced by Mr. Jesse Hill Ford. Many of you may remember or be familiar with Jesse Ford, not so much from his TMA activities, which were fairly brief, but for his writing abilities and literary accomplishments as author of such books as The Liberation of Lord Byron Jones, The Mountains of Gilead, and several others. Some of his works have been made into movies or adapted for television scripts. He was a frequent contributor to the Atlantic Monthly, and his byline is currently seen periodically in USA Today in the op-ed page. Jesse Ford left TMA for a position with the American Medical Association and was replaced in 1957 by Jack Drake, a Nashville newsman. Mr. Ballentine successfully merged the two budgets and operations into TMA proper while maintaining the position of public service director with added duties of legislative representation. When I joined TMA in February of 1963, I was the third member of that executive staff. My indoctrination came quickly when Drake decided to resign 60 days after I came on to become one of the original field men for AMPAC, the then newly created political action committee of the AMA. Drake's departure was just two weeks before my first TMA annual meeting, and Mr. Ballentine somehow managed to conduct that convention almost single handedly as I struggled to orient myself and learn as much as I could about politics, medical legislation, and PR activities and projects. My battlefield promotion to public service director came within the first year of my employment.

Some 13 years later when Jack Ballentine neared his retirement age, the Board of Trustees in September of 1976 named me executive director. Jack's last TMA annual meeting was in April of 1977, at which he was recognized and honored for his 23 years of service to TMA. I wish he could have lived to see this new structure and to be present on this occasion.

It became apparent during the 1983-84 year that 112 Louise Avenue was beginning to fill to capacity as staff and equipment was retained to provide more and more services to the TMA membership. Five years later every inch of space in the office was being utilized to the very fullest. Still trying to live within our facility, we converted half of the employee lounge to an office. Soon the other half had to be converted into another office. Fortunately the conference room was divisible with folding walls, and half of that space was turned into a combination mail room, employee lounge, copy room, and work area.

In 1985 the Board appointed a committee composed of three Nashville physicians who had served as TMA president to assist the executive director in searching for an appropriate site for the purpose of relocating the TMA headquarters. Dr. Jim Hays, Dr. Tom Nesbitt, and Dr. Morse Kochtitzky reviewed a number of potential locations after it was determined that further expansion of the 112 Louise Avenue building was not practical due to parking requirements and restrictions, as well as other building regulations and considerations. When property at the corner of 21st Avenue South and Ashwood, which was then occupied by the Ashwood Court Apartments, became available, the Board made the decision to purchase it and engage an architect to develop plans for a new headquarters facility. Three separate building possibilities and configurations for the property were suggested by the architectural firm of Adkisson, Harrison & Associates, and the Board unanimously settled on a plan to construct a threestory building of approximately 21,500 square feet, with sufficient ground-level parking, as the new TMA headquarters facility. The Building Committee, consisting of Drs. Bill Miller, Jim Craig, Hamel Eason, John Thomison, and Howard Salyer, was given the responsibility of bidding the project and selecting the general contractor. Gregg Construction Company was chosen as the general contractor, and groundbreaking took place May 29, 1990.

Although the building was not totally completed, the move from 112 Louise Avenue to 2301 21st Avenue South took place on Saturday, March 9, 1991. On the following day, March 10, the first committee meeting was held in the new building when the Nominating Committee gathered to conduct its business. We've been sort of busy ever since. Between March 9 and today the staff has managed to conduct the annual meeting in Memphis in April, to

overcome the final trials and tribulations of unpacking what seemed to be thousands of boxes, as well as overseeing the final construction details and finishing touches for the building. What you see here is what we've got: a facility that will serve TMA membership for years and years to come with adequate expansion space available to accommodate all staff and space requirements for the foreseeable future.

From the original staff of one secretary and one part-time physician-officer in 1927, TMA staff has evolved into a 22 full-time and two part-time employee staff of competent, talented individuals dedicated to the same professionalism as the membership that it serves. Your staff is extremely proud of your new home and our new home. We have a new address but we have a sustained commitment. The TMA staff is dedicated, and is working hard to be better, not just bigger. We hope the membership will view their new state headquarters with pride, just as we do. I also recognize and accept it that there may be some who do not share our enthusiasm. But as Malcomb Forbes once said, "If you have no critics, you likely will have no successes."

Dr. Nelson: It is a distinct privilege and high honor for me now to be able to introduce to you our special guest and AMA representative, James Todd, M.D., executive vice president of the American Medical Association. Dr. Todd, a general surgeon in New Jersey, is a cum laude graduate from Harvard University and Harvard Medical School. He has combined his clinical practice with service to AMA in many capacities. He was a delegate to the AMA, a member of the Board of Trustees, commissioner to the Joint Commission on Accreditation of Healthcare Organizations, and deputy executive vice president. Now he is the leader of the nation's largest organization of physicians. Dr. Todd, it is an honor for us to have you with us and we appreciate your attendance.

Dedication Address



James S. Todd, M.D. Executive Vice President American Medical Association

Thank you very much Dr. Nelson. For me it is both a privilege and honor to have been invited back to Tennessee, to be able to participate in this most

marvelous occasion that you have put together. It is also a pleasure to be able to bring you the greetings and the congratulations of the American Medical Association, which contrary to the opinion of some is indeed alive and well and functioning smoothly. You know, you folks here in Tennessee have what I think is a somewhat unique culture. Principles run deep, industry is its own reward, and there's an inner confidence able to withstand adversity more than we see in many parts of the country. And you know it is associations such as yours that have made medicine in this country great. Your contributions at the national level are well recognized. You have sent some marvelous people to work with the AMA. Your AMA delegates serve you extremely well in making sure that your physicians are heard, that the profession is well represented.

You should also know that your staff works extremely hard for you. Hadley Williams has distinguished himself no only at the Tennessee level and in the American Association of Medical Society Executives on the national level, but also is well known across the country as an advisor to the executive vice president of the AMA; he is now working on his second one. Keep at it Hadley, you'll get it right yet. But you should be very proud of your accomplishments here.

It also gives me enormous pleasure and privilege to salute you as you move into this magnificent new building, which I know many of you have sacrificed many long hours to see completed. I would be remiss if I did not also congratulate your spouses, who also put up with the many long hours when you were not with them in trying to further the activities of American medicine. They are proud of you, we are proud of you, and you should all be proud of this building.

Now I do not need to tell you that medicine is under siege, and as we look to the future I believe there ought to be four aspirations for the Tennessee Medical Association, for the federation of medicine at large, and certainly for the AMA.

First, we need a sharper focus. We too have limited resources, as does everybody else in this country, and increasingly, health care is going to have to compete with the savings and loan crisis, paying for the Persian Gulf, worrying about education, and the destruction of our infrastructure. We are not going to get everything we want; we're probably not going to get everything that we need. It therefore becomes imperative that we more closely monitor our priorities, deciding what really is important, what is important to take care of our patients, and then allo-

cate our resources according to those priorities. Clearly we are not going to keep everyone happy. Clearly there are going to be those who disagree, but the goal is to do fewer things better and with greater successes and processing.

Secondly, I think we need to be seen as the friend of the people we serve. Throughout history the medical profession has never been held in high esteem, even though individual physicians have uniformly been held in high esteem. But we need as a profession to be seen increasingly as a friend of the people we serve, and we serve many people. We serve the doctors of this country, we serve other organizations, Lord knows we serve our patients, the public, and unfortunately, on occasion we have to serve the government. Well, I believe that the politics of confrontation are ill suited for the times in which we live. Coalitions, cooperation, and occasionally compromise are the methods of success in 1990s. But all the while we have to remember there is a point beyond which we cannot go to compromise in our coalitions without losing our professionalism. That's when life gets very difficult, when we say beyond this line we cannot go because we are professionals that care for our patients.

Third, we must be the champions of professionalism, maintaining and developing and forwarding the ethics of our profession, addressing the increasingly knotty issues brought on by super technology, scarce resources, and societal preferences. But beyond ethics, we as professionals must assume a heightened sense of accountability. Probably for the first time we can do as much harm as good in exactly the same length of time. There is no limit to the amount of health care that we can give. For every condition and every situation there is a treatment, there is a procedure that can be done. The question is, "Should it be done?" We have physicians in this country today praising autonomy in clinical decision making without being willing to be accountable for what it is that they do. It seems to me it's time to begin to redefine the quality of health care we give as doing that which needs to be done, not just what is possible, but what needs to be done with reasonable expectation of benefit. Our professionalism also implies confidence. We the profession must find ways to maintain and document the confidence of our physicians in the least intrusive fashion possible, and we should not let others define what our confidence should be. We should be the ones to police ourselves.

Finally, professionalism includes collegiality. It is unseemly to see physicians suing other physicians, specialty societies fighting with other specialty

societies in order to protect their turf. That certainly is not in the spirit of collegiality. Today, whenever one group seizes an advantage it takes something away from some other group. Specialty societies are at the center of this, and I believe most firmly that specialty societies have the strength and the ability to make this profession of ours great or alternatively to destroy it if they continue to worry about whose turf is whose. As professionals we enjoy many privileges, and along with privileges come responsibilities, and how well we discharge these responsibilities may well determine the future of our profession. Lastly our federation, and indeed our whole profession, needs a new sense of boldness. We accomplish little by being cautious—nothing ventured, nothing gained-and we must strike out with some bold moves that will amaze our friends and confound our enemies. The May 15th Journal of the American Medical Association is a good example; 51 articles on reform of the health care system in this country met with uniform editorial surprise and approval within the medical profession. We got more visibility in one week across this country than we did in the previous year. We got so much attention that the White House really wanted to know what it was we were up to, and invited us to come in and explain our activities. That has never happened before. It seems to me it becomes time to address the issues of government intrusion, regulation, reimbursement, competence and scarce resources with confidence, not reaction, with a sense of service, not parochialism, with a sense of pride, not anxiety.

Now, having said that, let me just briefly touch on two areas where all physicians, and indeed their spouses too, need to be involved. The first is that of the Resource Based Relative Value Schedule (RBRVS) for the reimbursement of physicians. For five years physicians across this country worked to bring reason into the manner in which physicians were compensated by their government. The RBRVS concept is and continues to be valid. But our government, which it would be nice if we could trust, but unfortunately we can't, has found another way to chisel physicians as they try to solve a budget crunch. Now, your Association has all the details, and I'm not going to go into the matter, because it is not simple. But suffice it to say, if the implementation of the RBRVS is allowed to occur as it is now proposed, some of you will be paid less for your Medicare patients than you are today for your Medicaid patients, and it will continue to get worse as the time goes on. This does not need to happen, this cannot be allowed to happen, and it is up to you to send a torrent of letters to your congresspeople, to

HCFA, to Sullivan, to the administration, to move to talk to your legislators here in town, because the Congress is suddenly becoming aroused to the fact that the bureaucrats are beginning to take over the country, and they don't like it. We need an outpouring of support, and if this proposal is allowed to stand you will either end up becoming indentured servants or will not be able to care for your Medicare patients as you want to. I cannot emphasize too strongly the need for you to act, and to act now.

The other issue is the 37 million Americans who do not have adequate access to health care and expenditures for health care; that by most people is considered unacceptable. The profession has a solution for this; it is called Health Access America. It has 16 points that address quality, cost, and access. It addresses all of the issues that are out there, and it builds on the strengths of our current system. It preserves what is good, it fixes what is bad, it does not ask for some foreign system to be imported, and it is now seen all across the country as a serious effort on the part of the profession to preserve a unique health care system. I urge you, if you are not aware of it, if you don't know about it, again, go to the TMA. Talk to your patients, talk to any group you can get before, talk to your legislators about how we have to preserve what we have and fix what needs to be fixed. There will never be health care as usual again, and we must be sure that our patients are protected. We must be sure that we as a profession are seen as part of the solution and not a part of the problem. So learn about Health Access America. Promote it, for it fixes what needs to be fixed.

Let me leave you with just one final thought. There are those who tell you that the golden age of medicine is past. They run around spreading doom and gloom, forming more and more splinter organizations, some of them even called unions, because they don't think professionalism is equal to the task. Well don't you believe them. Sure, things aren't what they used to be, but they never were. Where is it written that being a professional was meant to be easy or secure. I believe medicine in the 1990s could be a dynamic, maturing profession with infinite opportunities for those who are willing to seize them, and those who will succeed in this profession of ours will be conscious of the judicious use of scarce resources, will cultivate their patients in their relationships, will not fear accountability, will not succumb to professionalism, and most importantly, will cling to that hallowed ethical tradition that says we as physicians are here to serve. I believe in American medicine, but I am not convinced that it by itself has all the answers. And I believe in organized medicine,

but I am not deluded into thinking that its full potential has been reached until all physicians in this country participate in the affairs of their profession.

Whatever our problems, real or apparent, we should never forget that this is the most exciting, most exacting, most rewarding profession there is. We should feel proud to be a part of it, we should be willing to fight for it. Congratulations and Godspeed in your new building.

Dr. Nelson: We will close this portion of the program now by hearing from our president of the Tennessee Medical Association, Howard Salyer, M.D. Dr. Salyer is a dermatologist practicing in Nashville. He was elected last April, having served as president of the Nashville Academy of medicine, and on the Board of Trustees of the TMA.

President's Remarks



Howard L. Salyer, M.D. President Tennessee Medical Association

I have been a physician for 30 years and I long to be able to continue my ministrations to my patients in the manner that I know, with the kindness and justice that I was taught, but interference is coming from all sides. I think that if we stand united, we can deal with this. Certainly in the next few years we may see more turmoil in our profession, as more change is about to take place than we have seen in the past. Dr. Todd, I do appreciate your efforts, the efforts of the AMA, and the efforts of the TMA in what you are doing in our behalf. For those of you who don't know, Dr. Todd is on vacation in New Jersey. Being a dermatologist, he's got too much sun on his forehead and he needs to take some sunscreen. We do appreciate your sacrifice, we appreciate your family allowing you to come and I am sure your time is very compromised and we are very grateful for your coming today.

Those of you who saw the dedication issue of the *Journal* saw this building on the cover, and I think it is magnificent. That had to start with a plan or a program, and Mr. Ken Adkisson, as Hadley alluded to, of Adkisson, Harrison & Associates, Architects,

created this plan. They presented the Building Committee with three plans, and we selected this building, with the exception of a little portico in front which we took away. It is truly a magnificent building, and I hope if you have not seen the dedication issue of the *TMA Journal* you will get one.

After meeting and deciding on this building, the committee met and interviewed the three contractors who were the low bidders; each of the contractors made a presentation to the Building Committee, and we selected Mr. Gregg and his construction company. After we made that selection, there was the business of being bonded; I want you to know that I represent the nearly 7,000 members of the TMA, and my daddy was an East Tennessee fiscal conservative. I've been fairly conservative in the stewardship of your money, and I was very much opposed to the purchase of these bonds because I thought that was money down the rat hole as Mr. Gregg was a contractor of very long standing and a friend of mine. When the building was about 90 plus percent completed, because of the savings and loan problem and other things, he went under, and I want to publicly state that I appreciate being outvoted in that meeting in purchasing those bonds. I am sure Hadley feels a lot better about it too.

After you take brick and mortar and carpet and air conditioning and plumbing, you have to decorate it; the Interior Design Associates decorated this building, and I think it is magnificent. I have built one house, and that was the most frustrating experience in my entire lifetime. We built a log house. It was a little bit unconventional, and you never know unless you have stood between the man who's paying the bill and the contractor how hard it is to build a house. That's where my precious wife stood, and every night I would come in and I would go look at the house and I would say, "Why didn't they do this, and why haven't they done this?" and she would say, "I don't know," and I would say, "You find out." That is a terrible place to be, and that is where Hadley has been throughout this entire episode; certainly, the man who has built this building is Hadley. He has been in contact with Ken, the architect, and I think we owe him a really nice round of applause. If you continue to do well, Hadley, we may let you stay around a few more years. . . . How many more years till retirement?

All of this is the bricks and the mortar and the stone that have created this building, but the real people who have created this building are the physician community of Tennessee and members of our TMA; these people who through their service and their unification with us in their stand and their



Partaking in the official TMA Building Dedication Ribbon Cutting Ceremony are (left to right) Dr. John R. Nelson Jr., chairman of the TMA Board of Trustees; Mr. Hadley Williams, TMA executive director; Dr. James S. Todd, AMA executive vice president; and Dr. Howard L. Salyer, TMA president.

contribution through the years have made this building possible. It is therefore dedicated this day to those physicians in Tennessee who have been in the trenches and have worked and have created and made this building possible. May we always be mindful that those are the people that this building is really home to, and that they are the ones deserving of the honor and the plaudits for this building. The past presidents who are in this audience today have labored and worked and brought us to this point. I

think great congratulations need to be said, because it is through their efforts and their sacrifice that we have been brought to this point. It is a wonderful building. It is a hot day. My father says that no soul is saved after 10 minutes, and I have been here longer than that. If you will join Dr. Todd and Dr. Nelson and me, we will cut the ribbon, and we will all go inside where it is much cooler and more pleasant. There will be an open house, and you may move about freely. The staff will be there to answer questions, and there are refreshments in the board room. Thank you very much for coming; we do appreciate it.



Enjoying a laugh after the ceremony are (left to right) Dr. Howard Salyer, TMA president, Mr. Hadley Williams, TMA executive director, Dr. James S. Todd, AMA executive vice president, Dr. Charles Ed Allen, TMA president-elect, and Mr. Don Alexander, TMA associate executive director.



Visitors enjoy the Open House in the new TMA board room after the Dedication Ceremony.

THE UNITED STATES ARMY RESERVE

HEALTH CARE PROFESSIONALS BONUS TEST PROGRAM

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The 1989 National Defense Authorization Act required that the Department of Defense conduct a test to determine the effectiveness of a recruitment bonus to attract health care professionals to the Selective Reserve of the Army. The 1991 National Defense Authorization Act directed that the test continue.

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Ventricular Septal Defect Caused by Nonpenetrating Trauma in a 3-Year-Old Child: Use of Extracorporeal Membrane Oxygenation In Preoperative Stabilization

RAYMOND A. DIETER III, M.D. and ALAN E. ANDERSON, M.D.

Introduction

Traumatic ventricular septal defects (VSD) caused by blunt injuries have been reported rarely in adults and even less frequently in children.1 Nevertheless, this lesion must be considered in the evaluation of a pediatric trauma patient with a new onset cardiac murmur. We present a case of traumatic VSD in a 3-yearold, lap-belt restrained, auto-crash victim, with a discussion of possible mechanisms of injury, diagnosis, and management. A role is suggested for extracorporeal membrane oxygenation (ECMO) in selected patients to allow delay in operative repair until better demarcation and healing of the margins of the defect have occurred.

Case Report

A 3-year-old prematurely born white boy was a lap-belt restrained front seat passenger in a head-on motor vehicle crash. He reportedly struck his head on the dashboard, but did not lose consciousness. Initial evaluation and stabilization were accomplished at a local hospital, after which he was transferred to our level I trauma center 18 hours postinjury for evaluation of a heart murmur and irregular breathing. Upon arrival he had a Pediatric Trauma Score of 8 (weight between 10 and 20 kg; minor open wounds), Revised Trauma Score of 11 (a respiratory rate of 36), and a Glasgow Coma Scale of 14 (eyes open to voice). Physical examination revealed a pulse of 176/min, blood pressure 96/50 mm Hg, multiple facial lacerations and abrasions, a small contusion of the anterior chest, a coarse grade 4/6 systolic murmur, and a tender, enlarged liver. Initial laboratory values included a hematocrit of 32.8%, amylase 32 U/L, arterial blood gas consistent with respiratory alkalosis, and creatine kinase of 715 U/L with a CPK-MB fraction of 46.9 ng/ml. Electrocardiogram (ECG) suggested slight right intraventricular conduction delay and nonspecific ST-T wave changes. Radiographic studies showed right pulmonary contusion with hemothorax. An intravenous contrast dynamic CT scan of the torso showed hemoperitoneum, with no obvious source. Contrast material was seen refluxing into the inferior vena cava and hepatic veins during the dynamic phase, suggesting right heart overload.

The patient was admitted to the pediatric intensive care unit with a diagnosis of traumatic VSD with right heart failure, pulmonary contusion, hemothorax, and hemoperitoneum. A central line was placed for monitoring. A dopamine hydrochloride infusion was started for inotropic support, and nitroprusside sodium for afterload reduction. The echocardiogram showed a VSD of 3 to 4 mm with shaggy edges and dilation of the right ventricle.

The patient's cardiopulmonary and hemodynamic status remained fairly stable for the next six days, and he was weaned from the dopamine hydrochloride and nitroprusside sodium. Treatment was started with digoxin, furosemide, and enalaprilat. On the seventh day, he deteriorated rapidly, with development of fulminant congestive heart failure and a large right pleural effusion, which was treated by tube thoracostomy, with only transient improvement in his respiratory status. An hour later he became cyanotic, and a chest x-ray revealed florid right-sided pulmonary edema with air bronchograms. He was intubated, paralyzed, and mechanically ventilated, and hydrochloride and dobutamine hydrochloride therapy was started. Repeat echocardiogram showed enlargement of the VSD to 6 mm. Maximal ventilator settings and an FiO₂ of 1.0 were required to maintain a barely acceptable PaO₂ and Paco2. Accordingly, arrangements were made for transfer to Ochsner Clinic in New Orleans for ECMO to attempt to stabilize his cardiopulmonary status long enough to allow operative closure of his VSD.

The patient arrived at the Ochsner Hospital with a left tension pneumothorax, and a thoracostomy tube was placed. Five hours later, ECMO was initiated using the right internal jugular vein and common carotid artery for cannulation. Nitroprusside sodium therapy was started and prophylactic antibiotics were used throughout the course. On ECMO day 6, the patient developed a coagulopathy, for which blood products and vitamin K were given as required. On the seventh ECMO day, the 15th postinjury day, he was taken to the operating room where his VSD was closed, the carotid artery repaired, and the jugular vein ligated. He was maintained on conventional mechanical ventilation postoperatively, and was able to be ex-

tubated on the seventh postoperative day.

His subsequent course was complicated by neurologic changes, Candida albicans infection, a carotid artery pseudoaneurysm, and a residual VSD. CT scan of the head revealed infarcts in the right parietal region and cerebellum, thought to have been caused by a shower of emboli or altered perfusion due to the ECMO. The neurologic deficits have resolved leaving only minimal residual. A full course of amphotericin B was required to treat the Candida sepsis. The pseudoaneurysm was

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surgically corrected with a saphenous interposition graft. The residual VSD is responsible for a 1.8 to 1 left to right shunt, which he is tolerating at home while taking digoxin.

Discussion

Several theories have been proposed to explain the development of VSD following blunt trauma. One or more of the mechanisms pointed out by Merzel et al¹ could have been operative in this case. First, the "hydraulic ram" effect, in which the abdominal contents are displaced upward, causing cardiac compression, could have played a role, since the patient was wearing a lap-belt. Second, a high pressure fluid wave may be created in the venous system, thereby increasing the right ventricular pressure to the point of rupture of the septum. Third, inasmuch as this patient had only a small anterior chest contusion, with no skeletal injury, another theoretical mechanism might be that the heart was compressed between the sternum and spine.¹⁻⁴ If the heart is in late diastole or early systole, it will be full, with the valves shut, creating a closed high-pressure system. Such a system could also be created by sudden deceleration.^{1,3} It has been hypothesized that skeletal injuries such as rib or sternal fractures may dissipate the energy and serve as a protective mechanism, thereby decreasing injury to the internal thoracic organs.1

Traumatic VSD should be suspected when the triad of blunt thoracoabdominal trauma, holosystolic precordial murmur, and ECG changes are found.3 The ECG changes are often nonspecific1 and may be of little use in diagnosis.^{2,3} This patient manifested the complete triad, prompting an echocardiogram. Our experience with this patient confirms the previously reported effectiveness of echocardiography in both confirmation of the diagnosis, and in following the progression of the evolving lesion.4,5

Finally, timing of the closure of traumatic VSD must be considered. If not fatal, large hemodynamically unstable shunts necessitate immediate repair,1 whereas smaller less hemodynamically significant defects may be monitored and closed electively if necessary.^{1,4} Experimentally induced VSDs have been shown to close in months,4 and there is a report of a 10-year-old girl whose defect closed spontaneously after eight years of observation.1 Intermediate lesions are best treated medically initially, followed by elective closure.1-3 This allows the contused, necrotic edges of the defect to demarcate and undergo fibrosis, creating increased tissue strength for suturing. Intra-aortic balloon pump assistance has been successfully used to stabilize and significantly delay operation in an adult with traumatic VSD.3 We were able to find no other reference to the use of ECMO in stabilization of such a patient prior to surgical closure of the defect. Currently, ECMO for children beyond neonatal age is available in only a few centers. Clearly, it was lifesaving in this case, though not without complications, and might be more widely employed in the future in similar circumstances as postneonatal ECMO becomes more widely practiced.

Acknowledgement

We express our appreciation to the ECMO Service at Ochsner Clinic and particularly to Dr. Kenneth W. Falterman and Dr. Mary L. Palermo with whom we corresponded for their support.

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HELP FOR IMPAIRED PHYSICIANS

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A Case of Hives and Hip Pain Following Steroid Injection

Case Report

A 19-year-old college football player with a history of asthma and atopy complained of hives, facial edema, wheezing, and a sore hip following steroid injection of his right trochanteric bursa.

Three months earlier the patient had an uncomplicated incision and drainage of a right "buttock" hematoma following a motor vehicle accident. Ten days before admission he noted erythema, swelling, and tenderness over the lateral aspect of his right hip. He took naproxen (Naprosyn) for two days, then discontinued the drug. Two days later an orthopedist aspirated 250 cc fluid from the patient's right trochanteric bursa and injected it with 1 ampule of Hydeltra-TBA (20 mg prednisolone tebutate, 1 mg sodium citrate, 1 mg polysorbate 80, 450 mg 2-sorbitol, 9 mg benzyl alcohol) per ml. Lidocaine was used to numb the skin. The fluid was not sent for cell count or culture. The following day, the patient developed diffuse hives, which were more pronounced around his joints. He was treated at the student health service with prednisone, 40 mg orally twice a day, diphenhydramine, 25 to 50 mg orally as needed, and topical hydrocortisone cream. The hives improved transiently after each dose of prednisone, but on the morning of admission, the patient awakened at 4:00 AM with facial and periorbital edema, wheezing, and chest tightness.

Physical examination showed an afebrile, tachypneic, normotensive patient with facial edema and diffuse urticaria; he was wheezing, but was not stridulous. He had a 10-cm erythematous, fluctuant, tender area of swelling over his right trochanter. The patient's WBC count was 14,800/cu mm (71% polymorphonuclear leukocytes, 21% lymphocytes, 5% monocytes, 1% eosinophils, and 1% band forms). An x-ray of his hip was normal.

The patient was initially treated with intravenous Solu-Medrol, 125 mg every six hours, diphenhydramine, 25 mg orally every six hours, and nebulized albuterol every four hours. His urticaria and bronchospasm resolved slowly and his therapy was tapered. The orthopedic service was to aspirate the patient's right trochanteric bursa, but the swollen area ruptured before it could be done. Culture of the fluid grew coagulase-positive *Staphylococcus*. Because of a history of severe penicillin allergy, the patient was treated with intravenous vancomycin. On the 16th hospital day a pseudobursa was excised in the operating room. He will be tested for sensitivity to prednisolone and vehicle once the purified components are obtained.

Discussion

In 1950, Thorn¹ first injected steroids into the knee of a patient with rheumatoid arthritis. Since then, the intra-articular and soft tissue injection of steroids has

been used as an adjunct to systemic therapy in a variety of rheumatologic and orthopedic conditions. Adverse reactions are relatively uncommon.

Local side effects of intra-articular and soft tissue steroid injection include a Charcot-like arthropathy, particularly following repeated intra-articular injections, tendon rupture, soft tissue atrophy, periarticular calcifications and ecchymoses, and, rarely, osteonecrosis.^{2,3} One to two percent of patients may experience a post-injection flare, or localized inflammatory reaction in the injected joint within 2 to 24 hours after intra-articular injection.⁴ The demonstration of phagocytized steroid crystals within the joint fluid of these patients suggests this represents a crystal-induced arthritis.

Infection rarely complicates intra-articular corticosteroid injection. Hollander⁵ reported an infection rate of 1/14,000 injections, while Gray et al⁶ reported a rate of 1/50,000. Contamination of the injected drug preparation (through the use of multidose vials), introduction of skin bacteria, hematogenous colonization of the puncture tract, and hormonal activation of previously quiescent injections have all been implicated as mechanisms for infection.⁷ *Staphylococcus aureus* infections account for more than half of the reported cases. Diagnosis of infection may be delayed because its signs are either obscured by immunosuppressive therapy or confused with a postinjection flare.

Systemic complications of intra-articular and soft tissue steroid injection include suppression of the pituitary-adrenal axis (particularly following repeated injection of long-acting preparations), and exacerbation of underlying diabetes mellitus.⁸ Facial and neck flushing follow steroid injection within 2 to 30 hours in as many as 31% of patients.⁹ Flushing appears to be most common with triamcinolone preparations. Several authors have reported urticaria and anaphylaxis to follow intra-articular and soft tissue injection of hydrocortisone or triamcinolone.^{10,11} Sensitivity to corticosteroid was confirmed by intradermal skin testing in some cases.

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Endobronchial Tuberculosis Mimicking Lung Cancer

Case Report

A 63-year-old white man entered the Nashville Veterans Affairs Medical Center for evaluation of weight loss and a lung mass. The patient is a retired cabinetmaker who was in good health until six months earlier, when he developed a cough productive of clear sputum, as well as some anorexia, and at admission had lost 20 lb. He had never smoked tobacco except for occasional pipe smoking in the remote past. He denied previous known exposure to tuberculosis or asbestos. Physical examination revealed a thin, elderly afebrile man. The chest contained scattered expiratory wheezes. There were no skin rashes, palpable adenopathy, or abdominal organomegaly. The chest x-ray showed a left hilar and suprahilar mass, new since 1989.

Fiberoptic bronchoscopy revealed a large necrotic-appearing endobronchial mass in the left upper lobe, from which multiple biopsies were taken. A tuberculin skin test caused a 26mm induration, and both sputum and biopsy specimens were negative for malignant cells but contained numerous acid-fast bacilli; cultures later grew Mycobacterium tuberculosis.

Treatment was begun with isoniazid, rifampin, and pyrazinamide, and at six months, his symptoms had resolved with slight shrinkage of the radiographic abnormalities.

Discussion

Endobronchial tuberculosis (ETB) is defined as inflammation of the bronchial walls from tuberculosis infection, and is established by the culture of the organism from bronchoscopic biopsy material. Caseous granulomata involving the bronchial walls are found in a minority (36%) of patients with ETB. In adults, it is thought that ETB may result from the nodal component of primary parenchymal infection eroding into the larger airways, as is the case in children, from erosion of an old calcific nodal focus into the bronchus with subsequent activation, or as a result of endobronchial spread from a cavitary focus. Usually the organism load

is low, and accordingly a negative sputum smear is the rule.² As in this patient, ETB may mimic primary malignant neoplasm of the lung, producing mass lesions, and weight loss as well as hemoptysis and lobar or segmental atelectasis.3 In the preantibiotic era, ETB often resulted in permanent bronchial stenosis. Currently, ETB is said to make up as much as 15% of total adult cases, and although the infection is quite curable, bronchial stenosis may still occur.4 ETB has been described in HIV-infected patients, although the frequency and importance of this association is not yet clear.5

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Prepared by Gary R. Margolies, M.D., chief medical resident, Nashville Veterans Affairs Medical Center.

Radiology Case of the Month

CHARLES L. ROBINETTE JR., M.D.; STEVEN M. WEINDLING, M.D.; and ALFRED S. CALLAHAN III, M.D.

Case Report

During the winter, the young driver of a car was found unconscious, with her passenger dead. The car was in the street and the motor was running. Once consciousness returned, the patient complained of reduced vision. Months later, she is unable to read.

MRI examination, performed on a 1.5T scanner five months after initial presentation, included T₁-weighted (TE 16/TR 550), spin density, and T₂-weighted (TE 30-90/TR 2800) spin echo images. Axial spin density and T₂-weighted images demonstrate bilateral symmetric high-signal intensity in the paravisual cortex, Brodmann's area 18 (spin density image, Fig. 1), and associated mild widening of the cortical sulci (T₁-weighted image, Fig. 2). This cortically based change spares the underlying white matter.

What is your diagnosis?

- (1) Butterfly glioma
- (2) Carbon monoxide poisoning
- (3) Cerebritis
- (4) Cerebral contusion



Figure 1. Axial spin density (TR 2800, TE 30) spin echo image at the parieto-occipital fissure level reveals symmetric gyriform hyperintense lesions confined to the cortex (arrows).

From Radiology Consultants Inc. (Drs. Robinette and Weindling) and Neurologic Consultants, P.C. (Dr. Callahan), Nashville.

Discussion

Since its early days, MRI has been shown to be superior in sensitivity to CT in imaging studies of the brain. All of the above intraparenchymal lesions have been better demonstrated with MRI than with CT. Lesions near the cortical surface are particularly difficult to image with CT due to beam hardening and reconstruction artifacts that occur at the calvarial inner table. In acute cerebral trauma, however, CT remains the imaging modality of choice, principally because of its superior visualization of extra-axial acute subarachnoid and subdural/epidural hemorrhage.

Carbon monoxide poisoning is the correct answer. The patient's initial laboratory data included a carboxyhemoglobin of 35%. With hyperbaric treatment, there was rapid return of CO levels to zero, but the treatment of the blood CO level did not prevent clinical injury to the paravisual cortex. This area of cortex is in a watershed of cortical perfusion between the middle cerebral and posterior cerebral artery territories. Often the clinical presentation is one of poor gaze-directed

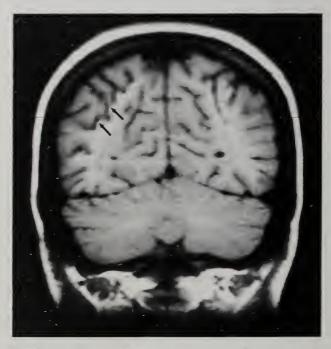


Figure 2. Coronal T₁-weighted (TR 550, TE 16) spin echo image demonstrates mild bilateral sulcal enlargement consistent with cortical atrophy (arrowheads).



Figure 3. Noncontrast CT scan obtained within first week following carbon monoxide intoxication. Symmetric globus pallidus hypodensity without cavitation (arrows) is seen in the acute stage of necrosis.

vision with optic ataxia (Balint's syndrome). This patient did not have optic ataxia, but did have a clinical deficit of reading because of the paravisual cortical injury. In Balint's syndrome, the area of dysfunction is larger than in this case. The present MR scan did not document similar changes in the classic areas of CO toxicity, the globus pallidus and hippocampus. Over a period of eight months follow-up, the patient's clinical condition has remained static.

The pathologic findings of CO toxicity in the CNS consist of four types of necrosis: (1) necrosis of the globus pallidus (Figs. 3 and 4), (2) lesions of the white matter with demyelination, (3) lesions of the "spongy" cerebral cortex, and (4) necrotic lesions of the hippocampus.2 CT has been successful in demonstrating the first two types. Only MR has been successful in demonstrating all types of lesions associated with CO toxicity.3 Because the lesions in this condition are known to manifest themselves as necrosis, it would be expected that they will be demonstrable indefinitely. The distribution of findings in this case is consistent with the known pathophysiologic effects of CO intoxication—hypoxemia in combination with relative hypotension. No other clinical neurologic disease was demonstrated in this patient since her known exposure to CO.

Cerebral contusion is less likely. Acute cerebral contusion is associated with cerebral swelling, frequently

(Continued on page 499)



Figure 4. Coronal gross pathologic brain section reveals bilateral globus pallidus cavitation (arrow on right) of late necrotic stage.

Miss That in Residency?

J. KELLEY AVERY, M.D.

Case Report

A 21-year-old man was brought into the emergency room (ER) of a community hospital following a motor vehicle accident (MVA) in which he had sustained multiple injuries. The initial history indicated that the patient had been restrained by a seat belt when his Jeep flipped over and he had to be extracted from the wreckage. The injured man admitted to having consumed a "six-pack" prior to his accident. There was no history of loss of consciousness.

The evaluation by the ER physician revealed "No acute distress, vital signs stable—Awake and oriented. Alcohol on breath. HEENT: About 1.5" semicircular laceration on left cheek with moderate ecchymosis. Tympanic membranes visible and without abnormalities. Neck: Nontender. Rectal not done. Genitourinary: No rectal blood or scrotal hematoma. Extremities: Moderate ecchymosis bilateral ankles; dorsales pedis and PT pulses intact. About a 2" laceration left lateral ankle."

X-rays of the "chest, C-spine, facial with zygomatic, bilateral ankle/foot" were ordered and the laboratory was asked to do hemoglobin and hematocrit. Fluids were given through large-bore needles, and a Foley catheter was placed. The lacerations were sutured after Betadine prep and irrigation.

The patient went to Radiology at 4:20 AM, about one hour after arrival in the ER; the radiologist read and reported the films the same day. The significant findings reported were a slightly displaced fracture of the right fibula and a nondisplaced fracture of the base of the fifth metatarsal of the right foot. The following is the radiologist's report: "Left foot: Lateral displacement of the second through the fifth metatarsal. Appears to be minimal lateral dislocation of the first metatarsal. Although not well seen, appears a fracture of base of third metatarsal. Findings represent a homolateral Lisfranc fracture dislocation. There is a disruption of articulation between navicular and medial cuneiform and dorsal dislocation of medial cuneiform. Disruption and widening of articulation between middle and lateral cuneiform."

The ER physician wrote admission orders about six hours after the patient arrived in the ER. He ordered ice to contusions, bed rest with bathroom privileges, elevate foot on pillows, and further orders from the attending physician. The patient was received on the floor with both feet in splints with elastic bandage wraps. It was noted that the toes on both feet were warm

The attending orthopedic surgeon saw the patient for the first time at 5:00 PM, about 14 hours after admission to the hospital. He apparently reviewed the films made the night before and concluded that "None of the fractures will require ORIF (open reduction with internal fixation); however, will not be able to weight bear for 10 to 14 days until pain and swelling subsides. Will weight bear first on the right."

Dr. Avery is chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood, and associate director of Medical Affairs, St. Thomas Hospital, Nashville.

The history and physical as dictated reflected the above impression in that the attending physician described the fractures of the right as "a nondisplaced fracture of the lateral malleolus and a nondisplaced fracture of the base of the fifth metatarsal." In his "plan," the attending physician again stated that none of the fractures would require ORIF. On the day after admission, the attending physician saw his patient about mid-afternoon, and made arrangements for physical therapy to teach the patient the transfer technique from chair to bed, etc. On the second hospital day, the patient was discharged home with his feet in well-padded compression splints and dressings.

The discharge summary refers to "some medial deformity of left arch." The attending physician again speculated that in 10 to 14 days a walking cast will be applied on the left side with gradual weight bearing.

One week after discharge, the patient was seen in the office of his orthopedic surgeon, and both feet and ankles were again x-rayed. His records state. "Feet show fractures have maintained alignment throughout. Still has some slight angular deformity of left first metatarsal. . . . Placed in SLWC on left with cast boot; will be allowed progressive weight bearing on the left." Although a cast was applied to the right, no weight bearing was allowed.

The young man was seen again five weeks after the injury, and again x-rays were made. Again "all fractures maintained alignment with early callus formation and bone healing." Two weeks later he was seen by his attending physician. "Can allow progressive weight bearing bilaterally."

It is interesting to note that three days before the above visit, the patient showed up in the office of another area orthopedic surgeon requesting an opinion. Five days later he went to yet another orthopedic surgeon asking for an opinion. From both of these physicians, the patient received the news that he would require an operation to attempt to reduce the fracture dislocation of the left foot. Each of the consultants confirmed the diagnosis that had been made initially by the radiologist on the initial films made on order of the ER physician within an hour of the patient's arrival at the community hospital. Both surgeons explained that the surgery would be very difficult and, in all probability, would necessitate a fusion of his forefoot.

On the day that the patient was scheduled to return to his attending orthopedic surgeon, he was admitted to another hospital under the care of the first consultant for his surgery. From the description of the surgery, it is clear that the intervening eight weeks had seen the development of sufficient callus that reduction of the dislocation was impossible and, indeed, a fusion was indicated.

On this same day, there appeared in the outpatient record of the original physician such self-serving language as, "consistently argued with and exhibited lack of compliance regarding restrictions recommended to him. At the time of the five-week visit, we had feedback from multiple sources that he had been weight bearing on both extremities contrary to instructions." Also in that office note, the original physician entered into the

record, "Also refused surgery early on regarding right first metatarsal bone." A week later another similar note appeared in the outpatient record. "Did not keep appointment again. In view of the irresponsible circumstances of his injury, along with his unwillingness to cooperate with treatment, recommendations, advice or follow-up, we can't feel responsible for either the cause or the outcome of his injury. I cannot help someone who refuses care."

Because of the delay in diagnosis and the consequent delay in appropriate treatment confirmed by the two consultants the patient had sought out, either on his own or on the advice of friends, and because their records had been secured by the plaintiff attorney, defense of this lawsuit was impossible and a settlement was made on behalf of the original orthopedic surgeon.

Loss Prevention Comments

I am told that a Lisfranc fracture dislocation can be difficult to see on x-ray. That offered little comfort in this case because the radiologist had "hit the diagnosis on the head." Did the attending orthopedist ever look at the radiologist's report? He must have looked at the films, but it is doubtful that he ever carefully read the report. I am aware that the orthopedist is an expert on x-ray interpretation of bones and joints. I wonder how many times the interpretation of a radiologist is so completely ignored? This discrepancy was very damaging to our defendant doctor.

It is interesting to note, and probably of significance in the area of physician/patient relationship, that the attending orthopedist did not see his patient during the first 15 hours of his hospital stay. One cannot help but conclude that this physician got off to a very poor start with his patient.

The attending physician does state in his discharge summary that there is "some medial deformity of left arch." He apparently missed the significance of that finding because he states later on his plans for the patient to begin ambulating and weight bearing first on the left, which he attempted to do as early as four weeks after the injury. The very self-serving notations in the orthopedist's office records make it likely that one or both of the consulting surgeons had somehow warned their colleague of impending trouble. Even if not prompted by the news of possible trouble, it was unwise to include in the record information that had not been recorded contemporaneously. It would have been just as easy to recall this later in the course of the impending litigation, and it would not have appeared so "phony."

It appears that this patient was setting his doctor up for litigation. I don't know of any way to be aware of this kind of patient behavior. In this case, if indeed the patient had exhibited the anger, resentment, and noncompliance that his doctor refers to after the "fat is in the fire," his physician could have confronted his patient with how he, the physician, feels about this kind of behavior and even suggested a consultation with one of his colleagues rather than let the patient move in that direction on his own.

Most of the time the game of "CYA" is lost by the one who plays it.

Radiology Case of the Month . . .

(Continued from page 497)

contains petechial hemorrhage, and extends in to underlying white matter. Chronic findings of cerebral contusion may include encephalomalacia (usually cortical and subcortical), white matter shear injury, and hemosiderin deposition. A contra-coup bioccipital cerebral contusion may result from frontal head trauma, but the MR scan in this patient reveals no cerebral swelling, white matter involvement, or signal intensities associated with acute (deoxyhemoglobin), subacute (methemoglobin), or chronic (hemosiderin) hemorrhage.

Cerebritis could give this picture, but these processes are most often asymmetric and have associated mass effect due to edema. The patient's presentation and history make this choice unlikely.

A butterfly glioma is unlikely, since these tumors involve primarily white matter. They also have mass effect which this case does not demonstrate.

DIAGNOSIS: (2) Carbon monoxide poisoning.

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OBRA 1987 and the Role of the Physician In Long-Term Care

RUTH M. HAGSTROM, M.D.

The Omnibus Budget Reconciliation Act (OBRA) passed by Congress in 1987 and further revised in 1990 encompasses some of the most comprehensive nursing home reforms ever seen. As a result, a tremendous impact has been and will continue to be felt by nursing homes and other health care facilities, as well as the patients served, in the months and years to come.

The total numbers of individuals ultimately affected will be substantial. Investigators for the Agency for Health Care Policy Research in Rockville, Md., have developed projections for estimated rates of nursing home admissions, duration of stay, and total lifetime admissions. Their findings indicate that more than 52% of all women and 33% of all men will enter nursing homes at some point during their lifetime. Among all patients who enter nursing homes, 55% will use them for at least one year and 21% will spend a total of five or more years in a nursing home.^{1,2}

Tennessee has a substantial number of such facilities—295 nursing homes, with 35,223 licensed beds in 1991. Virtually all of these facilities have been concentrating considerable energy, time, and resources in becoming informed about the requirements of the new law.

Beginning Oct. 1, 1990, the state of Tennessee implemented a new survey procedure to certify long-term care providers for Medicare and Medicaid according to the OBRA requirements. The objectives of the survey are to improve the quality of care in nursing homes and to make the gathered information more resident-centered and more outcome-oriented.

Although residents' rights have been a part of the state survey process for years, an increased emphasis is being placed on this requirement as a result of OBRA. The certification of nurse aide training also will be implemented as a part of the new regulations. In Tennessee, this impact will be lessened to some degree since the state already had nurse aide training requirements through its licensure program.

An extended survey must be conducted for those facilities having what is now known as "condition" level deficiencies. The extended survey focuses on

From the Bureau of Health Services, Tennessee Department of Health, Nashville. Dr. Hagstrom is medical director of the Bureau.

gathering information through review of facility records and policies and procedures. Also included is a comprehensive review of physician services, nursing services, and administration. The extended survey should identify those policies and procedures that produced substandard quality of care or quality of life, or noncompliance with residents' rights.

Skilled nursing facilities, but not intermediate care facilities, have been required by Federal Regulations (405.1122) to retain a licensed physician or osteopath to serve as medical director since Dec. 2, 1974. Responsibilities include coordination of the medical care in the facility to ensure the adequacy and appropriateness of the medical services provided to patients and to maintain surveillance of the health status of employees.

The medical director traditionally has been responsible for:

- (1) Developing written bylaws, rules, and regulations approved by the governing body that include delineation of the responsibilities of attending physicians.
- (2) Serving as liaison with attending physicians to ensure that their orders are written promptly on admission and reviewed at appropriate intervals.
- (3) Reviewing all incidents and accidents that occur on the premises to identify hazards to health and safety.
- (4) Developing policies for the delivery of services available to the patients (admission, transfer, discharge planning, patient property and personal rights, emergency services, patient care).
 - (5) Ensuring that patient care policies are followed.
- (6) Serving as a consultant to the Infection Control Committee, the Utilization Review Committee, and the Pharmaceutical Committee.

The medical director's role has changed under the new regulations. Skilled and intermediate care facilities are now required to have a medical director. Under OBRA 1987 the medical director is more involved in facility policy and clearly responsible for the implementation of resident care under these policies. The medical director is responsible for coordination of medical care in the facility, but not for the comprehensive care plan itself, which is now developed by the attending physician along with other facility staff serving on the team.

Physician services (attending physician) are described in the new section 483.40 of 42 CFR on Requirements for Long-Term Care Facilities. (For purposes of the Medicaid, but not Medicare, program, the distinction between skilled nursing facility and intermediate care facility has been abolished and replaced by a new term, nursing facility.) The major requirements for attending physicians in the new long-term care program are described below.

Physician Visits. At each visit, the physician must review the resident's total program of care, including medications and treatments, and must write, sign, and date progress notes and sign all orders.

Frequency of Visits. (1) For skilled nursing facilities, the resident must be seen by a physician at least every 30 days for the first 90 days after admission and at least once every 60 days thereafter. (2) For nursing facilities, the resident must be seen by a physician at least once every 30 days for the first 90 days and at least once every 90 days thereafter.

Nurse Practitioner/Physician Assistant. At the option of the physician, required visits after the initial visit may alternate between personal visits by the physician assistant or nurse practitioner except for tasks where a physician is specified by regulations. All other required visits must be made by the physician personally.

Emergency Care. The facility must provide or arrange for physician services 24 hours a day in case of emergency.

Comprehensive Care Plan. Comprehensive care plans mentioned above are required to be more in-depth than ever before. These plans must be prepared by a team including the attending physician, a registered nurse, and other appropriate staff and with the participation of the resident or family where practicable. The plan must be periodically reviewed and revised by the team. The plan must include measurable objectives and

timetables to meet the needs identified in the resident assessment.

Resident Assessment. The resident assessment (RA) is essentially all new. A standard approach, encompassing a minimum data set developed by the Health Care Financing Administration (HCFA), is used, describing, among other items, activities of daily living (ADL) capability. The RA is conducted or coordinated by the registered nurse and signed by all participants. The RA is updated every three months and reviewed annually and following any significant changes in patient status. The RA also forms the basis of the comprehensive plan of care, described above.

Another feature of OBRA that pertains especially to the physician's care of the patient is a section on unnecessary drugs. In essence, the intent of the regulations is to discourage excessive and unnecessary use of drugs, especially antipsychotics (AP). Specifically, residents who have not used AP drugs are not given these drugs unless AP drug therapy is necessary to treat a specific condition. Also, residents who use AP drugs must receive gradual dose reduction, drug holidays, or behavioral programming unless clinically contraindicated in an effort to discontinue these drugs.

Thus, through many new programs and processes defined by OBRA, focus will be on provision of services that attain or maintain the highest practical, physical, mental. and psychosocial well-being of each patient. Major members of the team called upon to help the facility meet the goals of OBRA are physicians—both attending physicians and the medical director of the facility.

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April 1992											
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday					
			1	2	3	4					
5 6 7 8 9 10 TMA 157TH ANNUAL MEETII Opryland Hotel—Nashville											
12	13	14	15	16	17	18					
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Reading, Writing, and Research

TED L. ANDERSON, Ph.D.

Reading and writing journal manuscripts are the primary mechanisms by which we as physicians and scientists communicate our observations and ideas, develop results of investigations into novel clinical applications, and learn about new procedures or therapeutic measures. In the 19th century, it was not infrequently decades after initial publication before practical applications were realized. Additionally, virtually every innovation employed in modern medicine was first described without relationship to its ultimate use. For example, the medical implications of Gregor Mendel's 1865 observations in the pea patch were not appreciated for more than 35 years after his reports, when Garrod recognized similar patterns in the inheritance of alcaptonuria.

The interval between initial report and extrapolation to clinical practice has been shortened significantly in the 20th century. In the 1940s Selman Waxman described a microorganism growing on plant roots, which led to the clinical utility of streptomycin soon thereafter. Investigation during the 1950s to the 1970s provided basic information on fertilization and development of mammalian eggs, which forged the scientific foundation for the soon-to-emerge clinical application of in-vitro fertilization and other assisted reproductive technology.

It is common now for as few as three to five years to intervene between laboratory investigation and clinical utility. Consider the expeditious progress in understanding the etiology, diagnosis, and AZT/DDI treatment of HIV infection and the availability of insulin and growth hormone derived from recombinant DNA technology. The development of polymerase chain reaction and DNA ligation amplification methods initiated an almost immediate cascade in elucidating specific gene defects responsible for a variety of diseases such as sickle cell disease and cystic fibrosis, and has ushered in the era of gene replacement therapy. The interval between the discoverer's revelations and the healers' applications into clinical practice will likely continue to shorten in the 21st century. This underscores the important role of timely communication through journal articles; basic science does not remain basic science very long any more.

Patients clamor evermore to physicians for skills,

Ted Anderson is a third year medical student at Vanderbilt University School of Medicine, Nashville,

medications, and devices to alleviate the ailments that limit the quality of their lives, or life itself. The thrust for new knowledge, while not on a wholly predictable course, cannot be muted if we expect to continue to improve medical care. Yet the public has every right to scrutinize the intentions and means invoked by investigators. Progress in biomedical research must be predicated upon the successful balance of the investigator's pursuit of knowledge and the public's willingness to support that endeavor, both harboring the conviction of ultimate benefit to mankind. As such, there is an increased responsibility for physicians and scientists to communicate with the public at a level seldom realized. This requires making a major investment in time and talent for listening to public concerns and needs, as well as explaining scientific objectives and possible clinical advances that are sought. In short, the public trust is the foundation upon which biomedical research must reside.

Those of us now in training in the classrooms, clinics, and laboratories of Tennessee's four medical schools will be listed among the next generation of medical and scientific leaders. Superimposed upon the opportunity to learn the science and art of research methods and clinical care is the obligation to communicate our observations effectively and responsibly. Herein lies the route to a fuller discourse among investigators and the public. We must treasure and conserve integrity and trust, placing it above personal ambitions or short-term research goals so pressing in the competitive world of scientific discovery. In so doing, we become stewards of a process that few are privileged to experience.

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Patient Relations Guidelines: Creating the Best Reception Environment

ROBERT BOWERS, M.D., Chairman
TMA Communications and Public Service Committee

Even when going to a doctor in whom they have every confidence, patients can't help being nervous. Whether it's because they're worried about the results of the examination, possible pain, trading all their clothes for a paper sheet, or just the lingering trepidation of childhood experiences, they're anxious.

The CARE program was established to give Tennesseans a positive image of the practice of medicine and physicians, partly by helping physicians create relationships with their patients that involve open, two-way communication. The environment of your office can have a big impact on your patients' state of mind. With the right touches, the waiting room and examining rooms can go a long way toward calming their nerves instead of exacerbating their jitters.

Following are tips for you to consider implementing in your reception area. Some of them may already be part of your office; others may be new ideas. They were gathered through informal focus groups and research with physician offices, and were used in 1990 with our Mission: Possible program.

- Look at your own waiting room. Many physicians enter their offices through the back door and haven't taken a good look at their waiting rooms recently. One day, enter the front door and look at your office as a patient might. What does your office say about you and your practice? Is it organized or disorganized? Functional or chaotic? Sit in the chairs. Are they comfortable?
- Soften the look. Dimming the lights a little and using softer, warmer colors such as peach or tan will have a calming effect. Artwork that coordinates with the colors can enhance that image. Live plants are also comforting, cheerful elements. On the auditory level, some relaxing music will help keep the reception area's environment a calm one.
- What kind of reading material do you have? Are your magazines outdated and dog-eared? Keep a variety of *current* magazines available that will appeal to different audiences—women, men, teenagers, children, parents, business executives—and remove them when they become two months old.
- Consider your patients' convenience. If coffee, soft drinks, snack machines, and telephones are available for your patients' use, it will make any waiting seem a lot shorter, especially if you can provide them at no charge

to your patients. If they didn't come alone, whoever has to sit in the waiting room while you examine your patient will appreciate the gesture.

- Television can distract them from worrying. A television can be locked on a cable channel that would appeal to everyone, such as CNN, the Disney channel, or the Discovery channel. Watching TV will take your waiting patients' minds off the examination ahead. It's best to use televisions only in waiting rooms large enough to also have quiet areas.
- Make the sign-in area easy to see and patient friendly. Your staff can help allay patients' fears by making the sign-in procedure friendly and easy. Have them greet patients before they have a chance to become confused. Make sure the signs around the registry area are large, legible, and friendly. This fosters a feeling of comfort and familiarity.
- Make the area quiet and professional. Have someone go through the reception area at least once a day to make sure it is straight and clean. Encourage your personnel to avoid loud conversations and laughter.
- Consider children's needs. Even if you don't have pediatric patients, sometimes your patients may bring their children with them. Provide small chairs and toys and books for children of various ages. Having an aquarium in a waiting room is a proven way to calm any patient, but children will be especially fascinated.
- Use artwork in the examining rooms and lobby. If you have a mission statement, hang it where everyone can see it. Decorate examining rooms with some lighthearted pictures and posters—the funnier, the better; that will do a lot to relieve tension. Get creative; put them on the ceiling if that's the view your patients will have of the examining room. If you have pictures or craft objects given you by patients, display them proudly. They're votes of confidence that won't be lost on your other patients.
- Display everyone's diplomas. In addition to your own certificates and diplomas, hang those of your staff members in examining areas. Your employees will appreciate the recognition and your patients will see how qualified your staff is.

These patient relationship reminders are intended to help TMA physicians and their staffs maintain the best possible patient relations.

OCTOBER, 1991 503

Farewell: A Legacy of Hope

C. JOHN TUPPER, M.D. President, American Medical Association

Thank you, Mr. Chairman, members of the House of Delegates, and ladies and gentlemen. Mary and I would like to thank all of you—each and every one—for a marvelous, exciting, fulfilling, and rewarding year. We thank the nearly 300,000 members of the American Medical Association, the 876 members of the House of Delegates, and all the state and county medical societies we have had the pleasure of visiting this busy year for extending to us your gracious hospitality.

It has been one year since I first stood before you and talked of deeds, and dollars, and especially of dreams—and about a peculiarly American knack of overriding cynicism and tackling what others call impossible. And this is my legacy to you: My belief in the knack and its ability to make possible our most fantastic dreams. I leave to you a legacy of the possible—of frontiers unexplored and of miracles yearning silently for their brilliance to be unveiled.

Some pundits have said that the 1990s, far from being the "me" decade, is instead very likely to be known as the "we" decade. That has always been true of the medical community, but perhaps these days it is truer than ever before.

Certainly a milestone moment in the decade of "we" did indeed arrive when last year, as I ushered in the 1990s as your president, the American Medical Association Education and Research Foundation (AMA/ERF) defied the limits of what once was thought possible, and for the first time passed the \$2 million landmark in its fund-raising efforts. This year we will exceed that landmark, reaching \$2.4 million, and we will exceed it because 70,000 Auxilians, unrestrained by cynicism, knew and believed that it could be done.

Year in and year out, that kind of optimism and faith has raised seven-figure sums of money for medical education, medical research, and medical schools—and these benefactors are the very anathema of cynicism. In fact, they are living examples of the legacy of hope that one generation bequeaths the next.

Year after year, you are idealistic enough to renew this covenant with the future. Year after year, you give money over and above your dues for this most worthwhile of causes. And year after year, you pay the highest possible compliment to yourselves by virtue of your commitment and generosity.

As the founding dean of the University of California at Davis Medical School, I personally found AMA/ERF support to be invaluable. It's the only true discretionary fund without strings attached.

For example, it allowed me to set up a checking account from which we could make emergency student loans, on any day, at any hour, without red tape. They were always short-term emergency loans, and every single one was repaid within the year in which it was made.

Moreover, let me say to every Auxilian who has worked on behalf of this program, and to every physician who has donated to it—it is you who are the warp and the woof of the "we" decade. You are living examples of what I lionize today—the triumph of hope over cynicism. And there is certainly a lot of cynicism out there for us to triumph over.

Sad to say, many a physician's lounge is filled with doctors telling horror stories about anything from liability to hassles. As one doctor tells a story, the next one tries to top it, and this negative spiral becomes a feeding frenzy until finally, somebody says, "I don't know why we put up with this—I don't even know why we're doing this." And then someone else will say, "If I had to do it again I wouldn't even go to medical school." Another will pipe up with, "I'll never let my kids go to medical school."

And I say to you today, have pity for, but do not emulate these doctors, who find frustration where their frontiers should be and desperation where their dreams should be. The fact is that our profession is filled with physicians who feel as fresh, as new, and as idealistic as I hope most of you do today—and as I do, some 43 years after leaving medical school.

Look at Dr. Laszlo Tauber, whose success in real estate has, according to Forbes magazine, made him one of the 400 richest people in the country. Yet he still practices surgery, full-time, at the age of 76—and often for little or no fee.

Look at Dr. Denis Radefeld, who traded his penchant for luxury cruises for vacations spent running clinics in impoverished parts of the Caribbean. Now he

This farewell address of the AMA president was delivered at the annual meeting of the American Medical Association, Chicago, June 23, 1991.

wouldn't have it any other way.

Or listen to Dr. Salomea Kape, an anesthesiologist who described her thoughts as she approached retirement in unforgettable words: "Why leave behind 35 years of practice," she writes—"a life of peculiar beauty," in her doting eyes. "The whispered 'thank you' at the end of an operation is the most beautiful music to my ears, like Chopin." She continues, "My fellow doctors, how many times have we cheated death, waiting in the corner, showing its ugly face in the straight lines of the ECG? We have felt like semigods, until the next time when we couldn't change the straight line into its usual valleys and peaks."

For every doctor who has ever practiced medicine—no matter what his or her specialty may be—experiences like these, of pride and of humility, lend our lives and our dreams a dimension that only other physicians are lucky enough to experience.

Dr. Tauber, Dr. Radefeld, and Dr. Kape, while each unique in his or her own way, are like thousands of other physicians, present and past, who have discovered a secret—a secret that I will share with you today, if you have not already discovered it for yourself. And the secret is that practicing medicine is its own most thrilling reward, and that there is no higher calling—there is no richer experience.

Every day we make possible lives that but for us would be lost; comfort that but for us would be calamity; and health that but for us would be harm. Every day we hoist a lantern of hope and shed light on some shadowy corner of sadness and cynicism. We do it when we teach medicine. We do it when we practice medicine. And we do it when we conduct medical research as well.

In fact, today we are experiencing the greatest scientific revolution ever recorded. We are beginning to unlock the mysteries of the gene—and isn't it marvelous that the little girl who was the first person to receive gene therapy, and who was not long ago unable even to leave her home, is now beginning to ice skate, and to take dancing lessons, and to lead a normal life.

We marvel at that miracle, and yet today we take so many other miracles as givens. Today, many people have almost begun to take for granted the wonders of transplants, or of pacemakers, or of babies conceived in test tubes. And perhaps this starts to happen when breakthroughs like these, however recent, become accepted parts of medical practice.

And yet not so very long ago these miracles were thought by most to be impossible to achieve. Within my own lifetime, I still remember the hospital where I interned, where an entire floor was devoted to nothing but patients with tuberculosis—and half of them were medical students, doctors, and nurses. In those days that meant that for at least an entire year, the patients were flat on their backs. Today, tuberculosis is treated easily on an outpatient basis, as is pneumonia, once the leading cause of death.

No one thinks very much any more about these onetime miracles of medicine. Yet, were it not for the idealists among us, they might never have come to pass. That's why, if I were 18 years old, I would choose to become a doctor all over again. Even today, at the age of 71, I see new challenges all around me every day. And every day I see proof positive that they can be achieved.

Now is not the time to give up on these efforts. In fact, now is the time to redouble them.

One year ago, I called upon you to join me in leading the way to provide compassionate health care to all Americans. I implored you then, as I implore you today, to spill your best selves and souls into meeting that challenge: To dream that dream. To demand the dollars for access, research, and education. And to do the deeds that need to be done.

In the past year, our progress has been remarkable—just look at the magnitude of the results:

One year ago, health care was a "sleeper" on the national agenda. But today this issue is percolating all over the country, and access to health care may well be the central domestic issue for the 1992 elections.

One year ago, the AMA was often labeled reactionary by observers in the press. Today, they call us leaders in editorials from coast to coast.

One year ago, few people would ever have dreamed that the president of the AFL-CIO would publicly sing the praises of the AMA. But that's exactly what happened. And when, last fall, I testified before that mainstay of organized labor, I saw doors that were once sealed closed swing open. Moreover, when their executive council endorsed an incremental approach toward health care reform, as we do, it was one of the most exciting episodes of my career. It was also an unforgettable moment in the history of health care policy.

Since then, the movement toward an emerging consensus has become more and more evident in every major arena. For example, a recent survey of leaders in business, labor, government, medical practice, hospitals, and the insurance industry found consensus or near-consensus in some areas of pivotal concern, including: the need for involvement of both the public and private sectors, the need for incremental change, and the need for limits on the right to sue for malpractice.

That may well have had something to do with our efforts at the AMA, which have also included: meetings with corporate executives and provider organizations, testimony at congressional hearings, input into the results of the Pepper and Steelman commissions on health care, and introduction in Congress of legislation on topics covering the gamut of health care reform issues.

The results of our efforts are filing in and they are most gratifying:

The federal legislative docket is now teeming with health access bills, and the elements of many bills are (Continued on page 515)

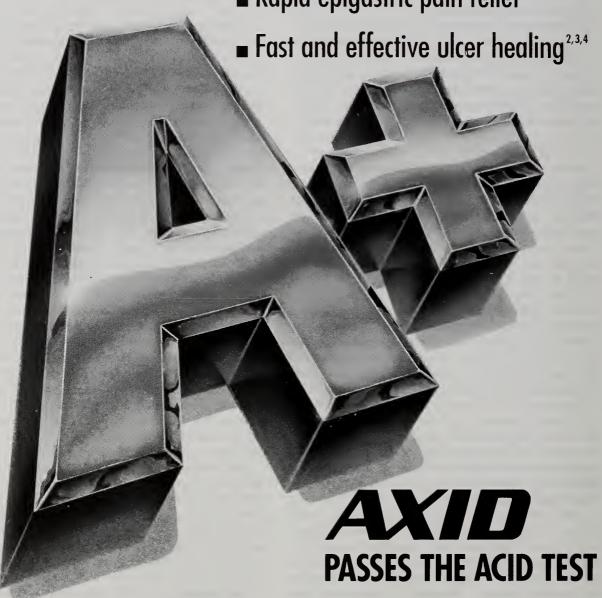
505

For excellent response in the treatment of duodenal ulcers...

AND nizatidine

has the right answers

■ Rapid epigastric pain relief^{1,2*}



*Most patients experience pain relief with the first dose. See adjacent page for references and brief summary of prescribing information.

NZ-2943-B-149347

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AXID 8 (nizatidine capsules)

Brief Summary, Consult the package insert for complete prescribing information. Indications and Usage: 1. Active duodenal vicer—for up to 8 weeks of treatment. Most patients heal within 4 weeks.

2. Maintenance therapy—for healed duodenal vicer patients at a reduced dosage of 150 mg h.s. The consequences of therapy with Axid for longer than 1 year

are not known.

Contraindications: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H₂-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H₂-receptor antagonists.

Precautions: General—1. Symptomatic resonse to nizabiline therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dystruction, the disposition of nizabiline is similar to that in normal subjects.

Laboratory Tests—False-positive tests for unpolitiongen with Multistix* may occur during therapy.

3. In patients with normal renal function and uncomplicated hepatic dissunction, the disposition of iniziatione is similar to that in normal subjects. Laboratory fest — Faise-positive tests for unbillingen with Multistix* may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, forazepam, lidocaine, phenytion, and warfarin. And does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin adult, increased serum salicytate levels were seen when nizabiline, 150 mg bill. As as administered concurrently.

Carcinogenesis. Mutagenesis. Impairment of Fertility—A 2-year rot carcinogenicity study in ratis with doses as high, as 500 mg (kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a deservated in the carcinogenic effect in male mice, although hyperplastic nodules of the lives were increased in the high-dose males as compared with placebic. Permale mice given the high dose of Axid (2,000 mg kg/day, about 30 times the placebic carcinoma and hepatic nodular hyperplassa with no numerical increases in hepatic carcinoma and hepatic nodular hyperplassa with no numerical increases and any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatitionac dose, with no evidence of varient as a doses any to 50 mg/kg/day, about 60 times the human dose, and a negative nursal animals or their progenic effect in str., male mice, and female mice (g

growth depression in pipus rearied by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother. Pediatric User—Safety and effectiveness in children have not been established. Use in Bidery Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and talorative test abnormalities. Ape alone may not be an important factor in the disposition of nizatione. Biderly patients may have reduced renal function. Adverse Reactions: Clinical trials of varying durations include almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of ver 1,900 incutatione; placebo-controlled trials of ver 1,900 incutatione; placetion on placebos, sweating (14% vs. 0,2%), urbicana (0,5% vs. < 0,01%), and somnolence (2,4% vs. 1,3%) were significantly more common with trizabline. It was not possible to determine whether a variety of less common events were due to the drug. Hepatic—Hepatice-Billuar injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to inizatione occurred in some patients. In some cases, there was marked elevation (> 500 IUL1) in SQOT or SQPT and, in a single instance of the some standard or some cases, there was marked elevation (> 500 IUL1) in SQOT or SQPT and, in a single instance of the some standard or some cases, there was marked elevation (> 500 IUL1) in SQOT or SQPT and in a single instance of the some standard or some cases, there was marked elevation (> 500 IUL1) in SQOT or SQPT and in a single instance of the following standard or some standard or some cases, there was marked elevation (> 500 IUL1) in SQOT or SQPT and in a single instance of the some standard or some cases, there was not continuation of Auct. Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventr

untreated subjects.
C/S—Rare cases of reversible mental confusion have been reported.
Endocnne—Climical pharmacology studies and controlled clinical trials showed no
evidence of antiandrogenic activity due to nizatidine, Impotence and decreased fibriod
were reported with equal frequency by patients on nizatidine and those on placebo
Gynecomastia has been reported rarely.
Hernatologic—Fatall thrombocytopenia was reported in a patient treated with
nizatidine and another H₃-receptor antagonist. This patient had previously experienced
thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura
have been reported.

Introduction and while taking other drugs. Rare cases of thrombocytopenic purpura have been reported. Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exhibitative dermatitis were

also reported.
#/ppersonst/nt/p-As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizations administration have been reported. Rare episodes of hypersensitivity reactions (eg. bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.
Other—Hyperunicemia unassociated with gout or nephrolithibasis was reported.
Eosinophilia, lever, and naussa related to inizabiline have been reported.
Eosinophilia, lever, and naussa related to inizabiline have been reported.
Devertiosage: Oxerdoss of And have been reported rarely; if overdosage occurs, activated charcoal, emess, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dishyss does not substantially increase clearance of inizabiline due to its large volume of distribution.

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NZ-2943-B-149347

Additional inform nation available to the profession on request.



Eli Lilly and Company Indianapolis, Indiana 46285

YOCON YOHIMBINE HC

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence. 1,3,4 1 tablet (5,4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea. dizziness or nervousness. In the event of side effects dosage to be reduced to $\frac{1}{2}$ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.3

How Supplied: Oral tablets of Yocon* 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

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president's page



HOWARD L. SALYER

Thanks for the Effort—We All Benefit

One of the benefits of leading the Tennessee Medical Association as its president is the opportunity to get a close look at the many and varied activities of the Association. Every member of TMA is touched in many ways by its programs.

Some of the signs that TMA is at work are obvious and tangible. Every month you receive membership publications—this *Journal* and the *Chart*, among others. Occasionally you see a colleague who has been asked to serve as an official TMA media spokesman quoted in the local newspaper on some health-related issue. You may attend a scientific session sponsored by your specialty organization held in conjunction with the TMA annual meeting in April. All these activities are important and together they advance the mission of TMA—serving the needs of physicians in Tennessee.

From my perspective, the one service that TMA provides its members that cannot be provided quite as well by anyone else is government relationships. About a dozen physicians serve on the Legislative Committee, ably chaired by Dr. Charlie White of Lexington, and another ten or so serve on the IMPACT Board, presently chaired by Dr. David Barnes of Chattanooga. These individuals, working with about 100 "contact physicians" who have special ties to local legislators, plus our two full-time lobbyists and one staff person who supports them, provide you one of the most important of TMA's many services.

When I set up my practice some 30 years ago, government played only a minor role in the practice of medicine. Even 10 or 15 years ago the pervasive involvement of government in our profession was dramatically less obvious than today.

Now, and for the foreseeable future, medicine and government are inextricably linked. Associations like TMA exist to benefit their membership. And, like any entity that wants to survive, the role of TMA must evolve in response to the evolving needs of its constituency. Publication of this *Journal*, accreditation of CME activities, and internal regulation of the profession are longstanding and irreplaceable components of TMA's mission. These services must now share center stage with TMA's political activities, which help us preserve the independence of our profession.

All of us owe a special debt of gratitude to our colleagues who give so much of their time and energy in serving on the Legislative Committee, on the IMPACT Board, as Legislative Contact Physicians, and as "Doctors of the Day" during the legislative sessions. Working with our two well-respected full-time lobbyists, Charlie Cato and Mark Greene, these physicians do so much for each and every one of us. When they reach out and ask us to contact legislators on a close vote or urge us to contribute \$150 to IMPACT, we owe them a positive and enthusiastic response.

Hal h Salyer 4.0.

P.S. Will whoever asked me for the Vanderbilt basketball team autographs at the TMA meeting in Memphis please call me. I have the autographs, but I can't remember who asked for them.

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OCTOBER, 1991

editorials

Sail On, Voyager

Some of you might recall having seen the title of this piece somewhere before. If you do, it is because you did. PBS recently aired a documentary so named, which had to do with the space probe Voyager. Don't look to this piece for details on space exploration, though, because you might, even likely

would, come up short. Details here are going to come up fuzzy, because I don't have all the necessary ones at my fingertips, and since this piece isn't about space exploration at all, I saw no need in getting them. In case you are now wondering just what this is about, I can only say that you will find that out if you just stick with me. I'm not ready to let that cat out of the bag just yet.

Planets become lined up in particular configurations every now and then, usually not for any particular reason, but just because in the scheme of things that's just the way it happened to come out. I say usually because it appears to have been a conjunction of three planets that formed the brilliant Star of Bethlehem, signaling the advent of the Christ Child. If that was indeed the case, the Advent would have to have been planned billions of years ago. I accept that, but this is just a little digression, because this piece hasn't to do with that, either. What it does have to do with is a similar situation among the planets that back in the early 1970s was seen as a rare opportunity for space exploration. The outer planets of the solar system were about to become lined up in such a way that a single space probe could be programmed to fly by them all; such would not happen again for several hundred years.

I'm unclear as to the exact reasons for launching dual probes, but it appears to have had to do with budgetary constraints. It seems to have been thought less expensive to have one satellite explore the closer planets and another the more distant ones. The two probes, christened Voyager 1 and Voyager 2, respectively, and known collectively as simply Voyager, were launched in 1977. In March 1979, Voyager encountered Jupiter, and in August 1980 explored Saturn. That accomplished, Voyager 1 headed for the stars. But then disaster struck Voyager 2; its space platform stuck, with its cameras pointed in the wrong direction, rendering it useless for the exploration of Uranus and Neptune, for which it had been designed.

Tapped for a seemingly impossible task, Voyager 1 became known to the folks at Cal Tech, home of the Voyager project, as the Little Satellite That Could. In what has to have been one of the engineering marvels of all time, the little satellite, designed for a four-year mission, and now a billion miles from home, was redesigned and reprogrammed from home base, using only radio waves, to go the whole nine yards, which in this case was another 3 billion miles in six more years. Because signal strength at Neptune would be one-ninth that at Saturn, radio telescopes the world over were linked together in networks to receive the trivial signals, while at the same time a new means of compressing the data was programmed

into the satellite's computers. Remember, this was 10 years ago. The new technology is now commonplace; it allows us to use our CD players.

In January 1986, Voyager approached Uranus, and on August 29, 1989, 12 years after launch, Voyager said goodbye to Neptune. Six months later, on Valentine's Day, 1990, the Little Satellite That Could turned on its cameras for the last time to take a last backward look at our solar system. In its transmitted image our Earth appears as a tiny, insignificant dot of light. That done, Voyager shut down its cameras and streaked outward toward Sirius, the brightest star in the Universe, which it will raise after some 300,000 years, provided things hold together that long. Bolted to the hull of what has been called the Ultimate Pathfinder is a plate, on which is inscribed a message addressed to whom it may concern; it says, among many other things, "This is a present from a small and distant planet. . . . "

In this issue of the Journal we carry the proceedings of the Dedication Ceremony, held on July 13, 1991, of the new home of the Tennessee Medical Association. Those of you who attended know that it went off without a hitch. So far as I could tell, every assigned function was carried out to perfection. As for the addresses, well, you can judge those for yourself. Dr. Todd's address was challenging and stimulating, Dr. Salver did his usual capable job of pulling things together, and Dr. Nelson was a masterful master of ceremonies—all as you would expect. It is therefore not to detract at all from any of the other speakers that I say, speaking only for myself, of course, that the high point of the ceremony was none of the above. It was Hadley Williams' brief recounting of the history of the staffing and housing of our Association, which allows it to function for all of us.

As the first glimmer of the planet Neptune, bathed in twilight because of its great distance from its light source, the Sun, began to come up on the monitors at Voyager's home at Cal Tech, there were shouts of joy and approbation. As the satellite escaped the solar system, there was a victory celebration for a job well done, a triumph of human ingenuity and resourcefulness. There was, at the same time, much emotion, some of it expressed on camera, but much more left unsaid, locked deep inside the breasts of those who had been participants, and especially those, I should think, who had been with the project from its inception.

Missing, as from any celebration, were some who had been instrumental in making it all possible. Memories of such special people always evoke a sense of both loss and gratitude, one that is so personal and runs so deep that it is often inexpressible

on any count, and any expression of it at all becomes woefully inadequate. Don't you know that during the celebration of Voyager there was many an expression of, "Gee, if only Old Joe (or whoever) could have lived to see this day."

We at TMA are beholden to so many, and to so many who are no longer with us. Hadley expressed the pathos for all of us at the Dedication when in speaking of Jack Ballentine he said, "I wish he could have lived to see this new structure and to be present on this occasion." So do I; so, I'm sure, did we all. And not just Jack, either, of course. But at that particular time, and in that particular place, especially Jack.

J.B.T.

Oh, the Money Tree, The Money Tree . . .

The love of money is the root of all evil \dots . I Timothy 6:10

That passage from the Bible has been not infrequently attributed by the scripturally illiterate to *Poor Richard*, aka Benjamin Franklin. These days many of the scripturally and otherwise illiterate, whose name is legion, likely also never heard of Poor Richard, though one hopes even they know who Benjamin Franklin was. On the other hand they might not, given the current deplorable state of learning generally. It is to weep. But I digress—already.

Whether or not they ever heard of Poor Richard, or read the letters of the Apostle Paul to his spiritual son Timothy, it is not unlikely that they would scoff at the advice anyway; why else would nearly everybody be clawing their way to the top of the heap? (They would also likely observe that those who are not so clawing are not desisting for want of wanting, but are simply, for whatever reason, noncompetitive. That is, of course, an oversimplification, but not by much.)

Those who accept the Apostle's injunction (we will charitably resist the urge to examine their motives) will probably go on to mouth something about happiness won't buy money (Oops! Sorry!) but then indicate that they sure do like (observe: like, *not* love, they might tell you) the things money will buy—and go right on clawing. They likely have suppressed what Paul said before and after that quotable quote—

something about not having brought anything into this world and the inability to take anything out of it, the dangers that the rich face in falling into temptation and a snare, and many a foolish and hurtful lust, which drown men (generic, I assure you) in destruction and perdition, and so on—but you know all that. The non-clawers aren't off the hook, either; coveting is as bad as having, according to God's word, even if not so satisfying, or for that matter not satisfying at all. Either way one could wind up in jail, or dead.

As an aside to those unidentified—indeed unidentifiable—few who out of conviction refrain from joining in the clawing, I apologize, and kiss the hem of your garment; in identifying yourselves so I can do it, though, you immediately become suspect, so that I am in no danger of having to so humble myself. On the other hand, we both win, because those who deserve it also won't mind not getting it. Bless you. (If you are congratulating yourself, you'd better watch it. "Lord, when saw we thee naked and clothed thee . . ." and so on, don'tcha know.)

A lot of what passes for spiritual rectitude is of course nothing more than political rectitude, though I wouldn't dare try to guess how much, and certainly not be specific about cases. Despite what the clergy might have you believe, spiritual rectitude is between a man (again generic) and his God; political rectitude is between a man and his everybody else, including, if he wishes, his preacher or priest—in short, anybody besides God whose opinion matters to him.

It is spiritually correct to wish the best of everything for everybody. How much this involves material things has been the subject of much debate, often heated, ever since man first got himself involved in the affairs of God and man. There is nothing in anybody's holy writ to indicate that man's lot is ever going to be anything but hard, and all that material plenty does is exchange one set of hardships for another; in fact, indications are that over the long term the dangers from plenty may be even greater than those from want. That attitude is why Marx (or was it Lenin, or possibly both? I forget) spoke of religion as the opiate of the masses. However any of that may be, God is more than somewhat explicit in enjoining His followers to ease the want and suffering of others whenever, wherever, and in whomever they encounter it. It is at this point that the distinction between spiritual and political rectitude becomes decidedly murky.

Everywhere these days one reads about the necessity for being "politically correct." So far as money goes, that means dividing up the loot, no matter who got it or how (unless, of course, one has a Washington connection; but that's another story).

How that is to be done is where the wicket becomes very sticky. In the first place, sometimes, or even a lot oftener than sometimes, those in the Congress, who decide about such things, appear not to know, or certainly if they know it not to care, that whenever they give something to someone, they have to take something away from someone else. The chief end of congressmen is to make certain that those deprived of their hard earned rewards in the process of the divvying up shall under no circumstances be numbered among their own constituents. All other legislative matters run a very distant second. The first law of political rectitude is to protect your own seat. By seat I do not mean, in this instance, backside, though protecting that would doubtless have an even higher priority. I refer here to protecting one's seat in the Congress; one does not accomplish that by giving away the store.

Another way of accomplishing that is by monkeying with the money supply. That is the bailiwick of the Federal Reserve Bank (The Fed). The Fed is run by seven governors, who are appointed by the White House (speaking figuratively, of course, as has been customary), and 12 regional presidents, who aren't. I understand nothing at all about economics, something I sometimes think I have in common with economists. In my simplistic view, there are two things that can be done with the money supply: shrink it or expand it. Everything The Fed does depends on a titration of those two actions; the more dollars there are out there, the less each one of those dollars is worth, and vice versa. My situation is one of a little knowledge being a dangerous thing, something I am persuaded I share with members, likely even most members, of the Congress. And yet the Congress is dying to get its mitts on The Fed, for no other reason, I should guess, than that the money supply is the only area in the federal domain in which oversight involves players who are neither appointed by the executive nor confirmed by the legislative branches of government-which is doubtless why The Fed generally functions so well. "Oh, but," says Congress, "we have staff who understand all those things, probably even better than the presidents of the regional federal reserve banks do. Look how wonderfully The Fed could be run if we were in charge."

A recent Wall Street Journal-NBC poll indicated that a healthy majority of the population puts the Congress at the very bottom of the credibility heap, though the majority thought their own members of Congress were acceptable or better (which is a good thing for the individual members—has to do with continuity in their seats). Think for a moment how it

would be if the Congress, in its zeal to be politically correct and to be sure that all of the money was going to precisely the politically correct places, were to do to the money system what it has done to medicine. The Fed has to make certain that interest rates are precisely those necessary for assuring that there will be enough money available for expansion of the economy (low rates) while at the same time remaining sufficiently competitive (high rates) with money instruments in other countries that investors will continue funding our huge debt. It looks like a delicate balancing act to me, one that the Congress would be happy not to have fool with; but then I'm no economist—nor, praise be, a member of the Congress.

I am a doctor, though, and I have watched what has happened and is happening to what was—and, for the moment at least, appears still is-the best medical care system in the world. In its zeal to be certain that all of our knowledge and technology be available to everyone at an affordable cost, the Congress has structured a monolithic bureaucracy that seems intent on ultimately depriving nearly everyone of nearly everything medical. All of the money and effort that could be used for medical care is being funneled into bureaucratic administrative overhead. (I suppose it would be useless in this day and age to even mention a free market as applied to either the economy or medicine, and so, even though I, in my crass inexperience, believe it might solve most of our problems, I'll let the matter drop.)

There is a money tree in Washington that keeps the economy supplied, and one fervently hopes it will continue doing that. It needs, though, careful tending and fertilizing. Congress sure enough produces a lot of fertilizer, which it could furnish for the job, but theirs is lacking in substance, and as any farmer knows, poor fertilizer, regardless of quantity, yields poor fruit. Congress seems to prefer golden eggs to more mundane solutions, anyway, but all of their geese, of which there is an abundance in Washington, continue laying just plain eggs, which are golden only when they appear on Washington faces, which is an unfortunately frequent sight.

If the Congress should take over The Fed, which Heaven forbid, it would be my studied estimation that the sight of egg-bespattered faces would increase exponentially, as when, for example, HCFA took the bit in its teeth and frustrated the wishes of its supposed masters, to the embarrassment, and enraging, of the Congress of the United States. But against whom would they rail except themselves? (Don't answer that; they'll think of somebody. In fact, they already did. Guess who?)

J.B.T.



Safety Belts

To the Editor:

I read with interest the article "Failure to Use Safety Belts: A Call to Arms for Tennessee Physicians" by Kenneth E. Olive, M.D., published in the August *Journal* (*J Tenn Med Assoc* 84:379-380, 1991).

About five years ago, a highly qualified internist friend from Memphis told me he had begun asking patients at the time of their annual physical examination if they wore seat belts. This seemed to me to be a good idea and I began doing so on a routine basis. While this appeared a bit awkward at first, it soon became a natural thing for me to do and it was expected by my patients to be asked along with other standard questions about smoking, drinking, exercise, and eating habits.

One patient walked in for his physical this year and announced that I had saved his life two weeks before. Not remembering having seen him in the emergency room, the CCU, etc., I asked how that came to be and he related a severe automobile accident during which time he had been wearing his seat belt and had been saved from serious injury. He recalled that he had not used his seat belts until a couple of years before when I had briefly encouraged him to do so based upon my habit of doing so at the time of his annual physical.

I certainly agree that Dr. Olive has a good point in that Tennessee physicians should encourage their patients to use seat belts. This might improve our annual death toll of 2,000 or so lives lost on the Tennessee highways every year. After all, one is just as dead if he dies from an automobile accident as if he dies from a heart attack or lung cancer. If we all profess to be interested in saving lives, shouldn't we extend this interest to every opportunity which comes our way?

Dwight R. Wade Jr., M.D. 501 20th St. #404 Knoxville, TN 37916



Ralph Gambrel, age 71. Died August 6, 1991. Graduate of University of Louisville School of Medicine. Member of Hawkins County Medical Society.

Louis C. Henry, age 65. Died August 17, 1991. Graduate of Washington University School of Medicine. Member of Memphis-Shelby County Medical Society.

James Manning King, age 79. Died July 19, 1991. Graduate of University of Tennessee College of Medicine. Member of Coffee County Medical Society.

Oscar French Noel Jr., age 77. Died August 22, 1991. Graduate of Vanderbilt University School of Medicine. Member of Nashville Academy of Medicine.

Joseph E. Sutherland, age 87. Died July 28, 1991. Graduate of Loma Linda University School of Medicine. Member of Nashville Academy of Medicine.

TMA Members Receive AMA Physician's Recognition Award

The following TMA members qualified for the AMA Physician's Recognition Award during July 1991. This list, supplied by the AMA, does not include members who reside in other states.

Physicians can receive the PRA certificate valid for one, two, or three years. For the one-year award, physicians report 50 hours of continuing medical education, including 20 hours of Category 1; for the two-year award, physicians report 100 hours of CME, including 40 hours of Category 1; for the three-year award, physicians report 150 hours of CME, 60 of which are Category 1.

Charles H. Alper, M.D., Chattanooga Edward E. Anderson, M.D., Nashville David G. Bowers Jr., M.D., Nashville Phillip L. Bressman, M.D., Nashville Lonnie S. Burnett, M.D., Nashville David A. Chadwick, M.D., Chattanooga Francis H. Cole, M.D., Memphis Noel T. Florendo, M.D., Memphis Thaddeus B. Gaillard, M.D., Memphis Larry D. Gurley, M.D., Nashville Frank L. Jayakody, M.D., Shelbyville Bruce E. Jones, M.D., Nashville Richard R. Jost, M.D., Spring City Joo-Taek Kim, M.D., Morristown Robert E. Knowling, M.D., Knoxville Rande H. Lazar, M.D., Memphis William L. Maden, M.D., Johnson City William M. Murphy, M.D., Memphis Lawrence S. Nagle, M.D., Chattanooga James R. Noonan, M.D., Dyersburg Clarence L. Partain, M.D., Nashville Randal J. Rabon, M.D., Johnson City Churku M. Reddy, M.D., Nashville Jeffrey P. Robbins, M.D., Bristol Stephen J. Schultenover, M.D., Nashville Richard L. Schultz, M.D., Oak Ridge Timothy A. Strait, M.D., Chattanooga Terrence L. Thompson, M.D., Memphis D. Thomas Upchurch, M.D., Oak Ridge Robert A. Vegors, M.D., Jackson Robert H. Williams, M.D., Kingsport Robert H. Wood, M.D., Crossville Kenneth N. Wyatt, M.D., Hendersonville

new members

The *Journal* takes this opportunity to welcome these new members to the Tennessee Medical Association.

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William A. Hays, M.D., Cleveland Timothy Allen Viser, M.D., Cleveland

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Anthony W. Jackson, M.D., Chattanooga William E. Meadows III, M.D., Chattanooga Thomas R. Peterson, M.D., Chattanooga Theodore D. Richards, M.D., Chattanooga Thomas R. Rimer, M.D., Chattanooga Jeanne A. Scanland, M.D., Chattanooga

COFFEE COUNTY MEDICAL SOCIETY

Hunter Willingham Norris, M.D., Tullahoma

DICKSON COUNTY MEDICAL SOCIETY Bill Thompson, M.D., Dickson

KNOXVILLE ACADEMY OF MEDICINE *Paul A. Hatcher, M.D.*, Knoxville

William C. Lindsay, M.D., Knoxville

LAWRENCE COUNTY MEDICAL SOCIETY

Robert V. Coble, M.D., Lawrenceburg

MONTGOMERY COUNTY MEDICAL SOCIETY

Bart J. Resta, M.D., Clarksville William Morris Steely, M.D., Clarksville

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(Student)

Alan J. Franklin, Nashville

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ROANE-ANDERSON COUNTY MEDICAL SOCIETY

David Michael Barron, M.D., Oak Ridge David Franklin Roberts, M.D., Clinton

SEVIER COUNTY MEDICAL SOCIETY

Frank Knopp, M.D., Sevierville

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NOVEMBER, 1991 VOL. 84, NO. 11

Survey of Emergency Medical Services in Tennessee

LYNN MASSINGALE, M.D.; DAN MANIS, EMT/Paramedic; GARY MESSOR

Preface

Emergency medical service (EMS) administrators and medical directors need to know how prehospital care is being provided to assess the strengths and weaknesses of their area's EMS. This paper presents the results of a survey and comparative study of EMSs in Tennessee and gives state and local officials data needed to help ensure quality EMS delivery. Data were collected using a survey form or directly from various agencies. Our assessment was designed to answer four primary questions:

- What is the status of advanced life support (ALS) delivery across Tennessee?
- How is EMS being provided in Tennessee's four largest cities/counties?
- How are prehospital medications protected from thermostability problems?
- What are trends and policies regarding prehospital medication acquisition and replacement?

Many significant differences existed among the services, often with the location within the state (East vs. Middle vs. West) having predictive value. Similarly, there were substantial variations between the state's four metropolitan areas, with one area statistically different in regard to response times of paramedics, lack of a first responder system, charges for ambulance service, and low ratios of ambulances

for the population served. There was a lack of ALS to many areas of the state and many EMS systems did not store their medications in accordance with manufacturers' guidelines. The need for more data collection was apparent.

Introduction

The goal of the survey was to ascertain how EMSs were being delivered in Tennessee. All aeromedical and ground EMSs were surveyed. The major emphasis was on aeromedical (five services) and Class "A" ground EMSs (30 services), since they provide virtually all prehospital ALS. Also, a more detailed survey and comparative study was done in the state's four largest cities, examining prehospital medication use, storage, policies, and attention to thermostability.

Methods

The study was conducted by collecting data via survey of all the EMS agencies in Tennessee. In order to assure compliance, a ten-day deadline was established as a cutoff for the data to be collected and received. All of the non-Class A services were asked to submit a completed survey by mail. All Class A and aeromedical services were surveyed by telephone since inferences from the study were primarily related to these services. Therefore, data relating to the Class A and aeromedical services were collected from June 1, 1990 to June 11, 1990.

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Reprint requests to Southeastern Emergency Physicians, Inc., PO Box 30698, Knoxville, TN 37930 (Dr. Massingale).

EMS IN TENNESSEE/Massingale

In addition, computer printouts from the Knox-ville Enhanced 911 System were reviewed to collect data and aid in the survey questions. After all Class A and aeromedical services were surveyed, all of the data were entered into a database. The MacIntosh Excel program with the appropriate established fields was selected to enter the data. This provided information for manipulation of data for future reference and enabled the investigators to observe data of existing Class A and aeromedical services in the state. Finally, this data entry allowed the investigators to answer the four major questions of the study.

What Is the Status of ALS Delivery Across Tennessee?

Results. Survey form questions were answered by five aeromedical and 30 Class A ground EMSs. Twenty-six percent (25/95) of all counties in Tennessee were served by a Class A EMS, and 70% of the population in the state was served by Class A EMSs (Figs. 1-3). The population served by the EMS agencies ranged from a low of 12,000 to a high of 700,000+. The number of paramedical ambulances per service ranged from a low of 1 to a high of 18. The trend across the state was for EMSs to be operated by the Fire Department in the larger cities, except Knoxville, where it is provided by a private company, and by county governments in the more rural areas, with some exceptions.

First responder service was provided by either the Fire Department or Volunteer Rescue Squad to 70% of all Class A services across the state, excluding aeromedical services. In all urban areas of the state the Fire Department provided medical first response, with the exception of Knoxville, which has virtually no first response within the city.

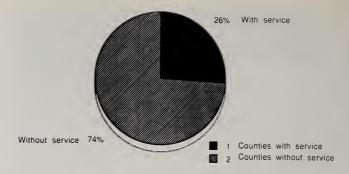


Figure 1. Percentage of Tennessee counties with Class "A" EMS.

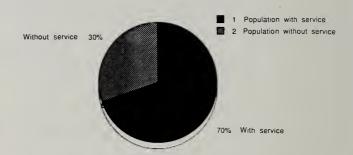
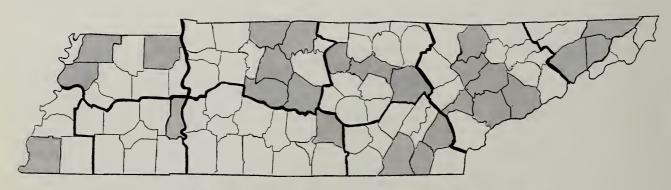


Figure 2. Population in Tennessee served by Class "A" EMS.

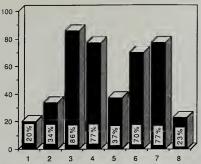
The larger EMSs generally obtained their medication through a wholesale pharmacy, and the smaller services procured drugs through a local hospital pharmacy. Most (25/35) services checked medications daily and had a written policy regarding medication storage.

Medical directors decided which medications were carried by paramedics in 66% of the services, with service directors and medical committees making drug choices for the remainder of the services.



Shaded areas indicate counties with Class A (advanced) ambulance service White areas indicate Class B (other) ambulance service

Figure 3. Location of Class "A" ambulance services.



- 1. Do they have telemetry?
- 2. Do they have transcutanous pacing?
- Do they do external jugular cannulazation?
 Do they do chest decompression?
- 5. Do they do intraosseous infusion?
- Does your area have a first responder?Does your EMS have standing orders?
- 8. EMS's without standing orders.

Figure 4. Percent of positive responses to questions.

Seventy-seven percent of all EMSs had standing orders for drug administration in cardiac arrest situations (Fig. 4).

The EMSs were asked if the paramedics were allowed to perform external jugular vein cannulation, chest decompression, and intraosseous infusion (Fig. 4).

External jugular vein cannulation was done by 86% of the services and 40% of all services do so by standing order. Chest decompression was done with a standing order 23% of the time and intraosseous infusion was done with a standing order 11% of the time. Services carried a wide range of medications and 74% carried narcotics.

Only seven of 35 EMSs had UHF telemetry (Fig. 4), and most that had telemetry no longer used it.

Thirty-four percent of Class A EMSs used transcutaneous pacing and most of the remaining services had plans for its use in the future.

In West and Middle Tennessee all paramedical ambulances were housed inside (Fig. 5). In East Tennessee 56 out of 68 (82%) ambulances were kept inside.

Discussion. Though only 26% of Tennessee's 95 counties has a Class A ambulance service, a high percentage of the population is served by paramedical services because of the populations of the metro areas. Seventy percent of the state's population have a Class A EMS (which ensures that a paramedic will respond to an emergency call but doesn't guarantee response times, costs, ability of paramedic, etc.), and several areas are served by paramedics employed by a non-Class A service. All services are required to meet the state requirements set forth for a Class A service but a great variety in providing services exists.

Conclusions. (1) Most citizens in Tennessee have a paramedical service in their community. (2) Class A services were found in all sizes of communities, although more urban areas were served paramedics than rural. (3) In all Tennessee cities larger than 150,000 (except Knoxville) the city Fire Department provided EMS and first response. (4) It is more common for smaller EMSs to obtain their medications through a local hospital pharmacy and for large EMSs to get drugs via drug wholesalers. (5) Because prehospital drugs are known to be susceptible to deterioration at temperature extremes, a state regulation should be used to ensure that all paramedical ambulances are housed inside. Most EMS providers recognize the need and have done so voluntarily. (6) Telemetry is minimally used in paramedical units at present and those surveyed felt it wasn't currently of value. (7) Most paramedics employed by Class A EMSs operate, at least somewhat, from standing orders. (8) Procedures such as intraosseous infusion, chest decompression, external jugular vein cannulation, and the use of standing orders to expedite treatment are allowed in Tennessee and should be utilized by more Class A services. (9) There is a need for more state requirements specifying drugs on units. Most services were carrying more medications than the state requires, but to ensure uniform minimum standards more requirements should be enacted.

How Is EMS Being Provided in Tennessee's Four Largest Cities/Counties?

Results. In this part of the study several parameters of assessment were used. These were am-



Figure 5. Percent of paramedical ambulances housed inside.

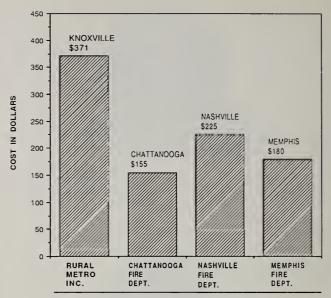
EMS IN TENNESSEE/Massingale

bulance providers, type of service, price of ambulance transportation (Fig. 6 and Table 1), ambulance response times (Fig. 7), population served by the service, first responder provider, first responder response times (Table 1), number of ambulances kept inside, and total number of ambulances in the county (Figs. 5 and 8; Table 2).

Discussion. Unfortunately, when comparing number of ambulances in various areas one may be comparing apples to oranges. To say that the six ambulances in Knoxville are the same as six of Nashville's 15 ambulances would be in error, since the ambulances in Knoxville are sent on both non-emergency and emergency calls, whereas Nashville's ambulances are sent only on emergency calls, with the result that the same six ambulances in Nashville are much more available for emergency calls. Greater ambulance availability generally results in lower response times. In an urban EMS sending ambulances on both nonemergency and emergency calls, 10 to 12 ambulances may be needed to equal six in an emergency-only operation.

Among ambulance service providers, one alternative way of viewing these data is to compare number of ALS "unit hours" per month, i.e., total number of hours a given unit is available. If this formula is used, the Knoxville figures "improve" to an average of 62/3 ALS units available each day.

The number of 24-hour ambulances in Knoxville (Table 1) does not include the Knoxville Fire Depart-



COST IS FOR AN EMERGENCY AMBULANCE WHERE PARAMEDIC TREATS A PATIENT HAVING CHEST PAIN WITH OXYGEN, HEART MONITOR, AN IV. ONE BOLUS OF LIDOCAINE AND TRANSPORTS 7 MILES TO A HOSPITAL

Figure 6. Cost of ambulance transportation in Tennessee cities.

ment ambulance, as it is not routinely used by the public, but most commonly for fire fighters and police officers only. The Knoxville Fire Department ambulance had an average response time of 4.6 minutes with no charge. The Knoxville Fire Department averaged two to three EMS calls a day, whereas other ambulances in Knox County averaged 12 to 18 calls a day. Also, the Red Bank Fire Department provides EMS to the city of Red Bank with one

TABLE 1

	KNOXVILLE KNOX COUNTY	CHATTANOOGA	HAMILTON COUNTY	NASHVILLE DAVIDSON COUNTY	MEMPHIS	SHELBY COUNTY
PARAMEDIC AMBULANCE PROVIDER	RURAL METRO CORP.	CHATTANOOGA FIRE DEPT	HAMILTON COUNTY EMS	NASHVILLE FIRE DEPARTMENT	MEMPHIS FIRE DEPARTMENT	MEDIC AMBULANCE SERVICE
TYPE OF SERVICE	EMERG/NON-EMERG	EMERGENCY ONLY	EMERGENCY ONLY	EMERGENCY ONLY	EMERGENCY ONLY	EMERG/NON-EMERG
NUMBER OF 24 HOUR AMBULANCES	6	6	5	15	18	8
PRICE OF AN AMBULANCE CALL	\$371	\$155	\$225	\$210	\$180	S175
AMBULANCE RESPONSE TIMES	10.5 MIN	5.0 MIN.	8.0 MIN	6.4 MIN.	6.5 MIN.	11 MIN.
POPULATION SIZE SERVED	381000	170000	170000	580000	700000	150000
FIRST RESPONDER PROVIDER	NONE IN CITY RMFD IN COUNTY	CHATTANOOGA FIRE DEPT	DIFFERENT PROVIDERS	NASHVILLE FIRE DEPT	MEMPHIS FIRE DEPT	SHELBY COUNTY FIRE DEPT
FIRST RESPONDER RESPONSE TIMES	NONE IN CITY	CFD 3.0 MIN.	N/A	NFD 3.0 MIN.	MFD 3.0 MIN.	N/A
NUMBER OF UNITS KEPT INSIDE (DRUGS KEPT UNDER NORMAL TEMPS)	1	6	5	15	18	1
NUMBER OF UNITS OUTSIDE	5	0	0	0	0	7
TOTAL NUMBER OF EMERGENCY AND NON-EMERGENCY AMBULANCES (FROM ALL PROVIDERS IN COUNTY)	12	20	SAME UNITS AS CHATTANOOGA	28	37	SAME UNITS AS MEMPHIS

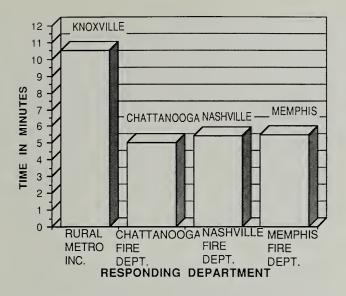


Figure 7. Response times for paramedical ambulances.

ambulance in Hamilton county, and the Bartlett Fire Department provides EMS to the city of Bartlett with two paramedical ambulances in Shelby County. These ambulances are not shown in the chart (Table 1).

The prices for an ambulance call were for a hypothetical patient experiencing chest pain from a possible heart attack. The paramedic administered oxygen, one medication (lidocaine 75 mg bolus by IV), monitored the patient, and transported him seven miles to a hospital. In its simplest terms, in services that are operated by a government agency such as the fire department the total cost of providing EMS to the community is the amount budgeted for that division plus any in-kind services provided by the governmental body. Fees charged directly to patients and/or their insurance companies are usually credited to the government agency's general revenue fund.

For private service, the total cost to the community is the sum of any subsidy provided to the service by the governmental unit (county, city, etc.) plus fees charged to patients and/or their insurance companies.

As the survey demonstrated, the charges assessed directly to patients and/or their insurance companies were highest in Knox County. Conversely, however, the amount of subsidy paid by Knox County to the EMS provider averaged \$2.17 per capita per year, while Nashville/Davidson County's budget for its governmentally operated EMS averaged \$11.20 per capita per year. (This is based on a comparison of populations, number of runs per year, total budgets, charge per trip, estimated collections, and govern-

mental subsidy.) No attempt was made by the study to recommend either type system, and careful analysis must be done in studying "rates," "charges," "prices," and "costs" of EMS.

Ambulance response times were measured from the time a call for help was received until EMS was on the scene. The total number of ambulances was for any ambulance in service routinely during any part of the day.

Conclusions. (1) In all major cities of Tennessee with the exception of Knoxville, the primary provider of EMS used paramedical ambulances for emergency calls only. The urban areas with commercial forprofit ambulance services (Knoxville/Knox County and Shelby County) did both emergency and nonemergency calls while the areas served by public service ambulances did emergency-only calls. (2) There is a need for more ambulances in Knoxville. Knoxville/Knox County had a poorer unit-to-population ratio than other Tennessee metro areas. (3) Knoxville/Knox County and Shelby County had long (longer than ten minutes) ambulance response times (most guidelines call for ALS within eight minutes). (4) The price of ambulance service in Knoxville was very high (as compared to other areas surveyed). (5) A first responder system is needed in Knoxville. There is no first responder in the city of Knoxville (with the exception of a very small percentage of the time when a volunteer agency is sent). In all other metropolitan areas of Tennessee the Fire Department ambulance is sent. First response is very important for improved patient outcomes. The American Heart Association guidelines call for basic life support within four minutes of the cardiac arrest. (6) The

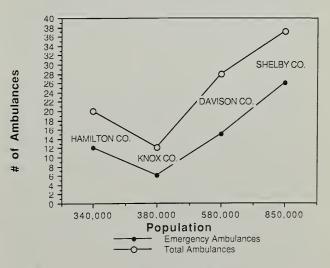


Figure 8. Ambulance-to-population ratio in Tennessee counties.

EMS IN TENNESSEE/Massingale

paramedical ambulance should be housed inside in Knox County. The paramedical ambulances were, for the most part, housed outside in Knox and Shelby counties, where the medications were exposed to temperature extremes and not stored according to manufacturers' guidelines.

How Are Prehospital Medications Protected From Thermostability Problems?

Results. Recently the problems associated with thermostability became a major concern to the investigators. To evaluate the Class A EMS providers across Tennessee, each service surveyed was asked how many paramedical units were kept inside in conjunction with those kept outside (Fig. 5).

From the database, the total Class A paramedical services in Tennessee operated 147 available units. Total units parked outside tallied 13, while 134 units were stored inside at regulated temperatures. In Tennessee 91% of the Class A services keep the available units stocked with ALS medication inside some storage facility.

Unfortunately, those units exposed to various environmental temperatures contained stored medications subject to thermal degradation. A suggested recommendation for a drug storage protocol should help assure adequate protection from specific existing environmental extremes associated with units stored outside.

Discussion. For the past decade, it has become apparent that medical control has not been aware of the potential for environmentally created chemical alterations in ALS drugs stored and used by countless paramedical agencies throughout the world. A recent study subjecting drugs to elevated temperatures suggests that except for isoproterenol ALS drugs might not be particularly affected by high temperatures. A number of questions arise regarding the design of the study, but obviously opinions conflict as to the severity of the problem of thermal instability (telephone interview from Melissa Kraus, Abbott Laboratories Hospital Products Division, July 30, 1990).

At least one of the Tennessee paramedical services consistently noticed a lack of predicted response to cardiac medications, which were not out of date. The service reporting this information often parked the unit outdoors, exposed to extreme temperatures. Epinephrine is especially sensitive to temperature variation. A lack of positive response to epinephrine was noted during some prehospital cardiac resuscitations, suggesting the temperature extremes as a possible source of drug degradation.¹

TABLE 2

AMBULANCE UNITS TO POPULATION RATIOS

	Total Ambulance	Population	Unit/Pop Ratio
Knox County	12	381,000	1:31,750
Rural Metro Inc.	8		
Knoxville Fire Dept	1		
GBE Ambulance	3		
Hamilton County	20	340,000	1:17,000
Chattanooga Fire Dept	6		
Hamilton County EMS	5		
Red Bank Fire Dept	1		
Chattanooga Ambulance Ir	nc 5		
Pioneer Ambulance Inc	2		
Memorial Hospital	1		
Davidson County	28	580,000	1:20,714
Nashville Fire Dept	15		
Professional Ambulance In	c 7		
Medi-Call Ambulance Inc	3		
Gold Star Ambulance Inc	2		
Ambucare Ambulance Inc	1		
Shelby County	37	850,000	1:23,513
Memphis Fire Dept	18	,	,
Bartlett Fire Dept	2		
Medic Ambulance Inc	17		

Most manufacturers of prehospital drugs recommend storage at or below 86°F. Inside a closed and unventilated prehospital drug box compartment the temperature can be higher, and often this temperature remains at this extreme longer than if the drugs were in the outside air. In many places these drugs are exposed to many days of extremely high temperatures without being used or replaced.²

Currently, throughout North America we know of no organized attempt being made to protect field drugs from temperature extremes. Drug manufacturers provide little data about the amount of chemical degradation produced by prolonged exposure to environmental extremes. It is hoped that in the future there will be additional scientific studies relating to time/temperature degradation effects.³

Finally, we hope to increase the awareness of thermostability problems and their consequences in Tennessee. Introducing the issue will perhaps shed light within the medical control community on an issue that has not been adequately studied, identified, or solved.

Conclusions. (1) Drugs rendered unstable by exposure to temperature extremes can create a catastrophic situation of which many ALS providers are unaware. (2) Many of the cardiac drugs are sen-

sitive to temperature extremes, but additional studies should be done to ascertain the magnitude of this problem. (3) If prehospital drugs are shown to be susceptible to significant deterioration with temperature extremes, state regulations should ensure that all paramedical ambulances are housed indoors. Most EMS providers recognize the need, and have done so voluntarily. (4) Depending on the paramedical deployment system, methods exist to assure adequate protection from specific environmental extremes. (For some recommendations see Palmer et al. 1) (5) Hence, it is our intent to encourage increased awareness of thermal instability and its associated complications.

What Are Trends and Policies Regarding Prehospital **Medication Acquisition and Replacement?**

Results. Data surveyed from the 35 Class A and aeromedical services indicated that 30 obtained drugs from the contract hospital pharmacy after expiration; one service obtained medication from the local pharmacy after expiration. After medications were administered on a case-by-case basis, 32 of 35 services replaced medication from the hospital pharmacy, while three used other means, such as EMS stock supply at the station, or local pharmacy. In general, the majority of services surveyed used the contract hospital pharmacy to obtain stock initially for paramedical units. Five of the 35 services, however, chose other methods of securing stock for the paramedical unit, including the local pharmacy or additional stock kept at the station.

Finally, the importance of drug expiration was considered while constructing the survey. Therefore, we asked how frequently the services check their inventory of drugs kept on board the unit. (For a more specific representation of the following questions see Table 3). The results of the inventory check demonstrated that 25 services checked drugs daily, two weekly, and eight monthly; no service in the state checked drugs annually for out-of-date inventory.

Discussion. We were concerned about methods of drug procurement by EMSs across the state. We considered the following areas: (1) Procedures used to replace outdated drugs. (2) Procedures used to replace drugs on a case-by-case basis. (3) How are

TABLE 3 METHODS OF DRUG PROCUREMENT IN TENNESSEE FOR CLASS A PARAMEDICAL UNITS AND AEROMEDICAL SERVICES

	Frequency	Frequency (%)
Outdated Drug Replacement	t	
Hospital pharmacy	30	85.7
Pharmacy wholesaler	4	11.4
Local pharmacy	1	2.9
	35	100.0
Case-by-Case Drug Replace	ment	
Hospital pharmacy	32	91.4
EMS stock at station	1	2.9
Local pharmacy	2 35	5.7
	35	100.0
Initially Obtained Stock for		
Paramedical Unit		
Hospital pharmacy	30	85.7
EMS stock at station	4	11.4
Local pharmacy	1	2.9
	35	100.0
Frequency of Drug Inventor	y Check	
Daily	25	71.4
Weekly	2	5.7
Monthly	8	22.9
Annually	0	0.00
	35	100.0

drugs for stock on the paramedical unit obtained initially? (4) How often are drugs checked for inventory (i.e., daily, weekly, monthly, or annually)?

Observation of the results indicates Class A and aeromedical services in Tennessee use the respective contract hospital pharmacy as the primary means of drug procurement. As indicated in Table 3, there are also other means used for securing medications. These data are a reasonable indicator of the services that store medication at the EMS station.

Conclusions. (1) The majority of EMS providers in Tennessee procure drugs from the contract hospital pharmacy. (2) Twenty-five of the 35 services check their drug inventory daily.

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*Most patients experience pain relief with the first dose. See adjacent page for references and brief summary of prescribing information.

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AXID® (nizatidine capsules)

Briel Summary. Consult the package insert for complete prescribing information. Indications and Usage: 1. Active duodenal vicer—for up to 8 weeks of treatment. Most

patients heal within 4 weeks.

2. Maintenance therapy—for healed duodenal ulcer patients at a reduced dosage of 150 mg h.s. The consequences of therapy with Axid for longer than 1 year

are not known.

Contraindications: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H₂-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other

should not be administered to patients with a history or hypersensitivity to outer Hy-receptor antagonists.

Precaulions: General — I. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dystunction, the disposition of nizatidine is similar to that in normal subjects. Laboratory Tests—False-positive tests for urobilinogen with Multistix* may occur during therapy.

2. Dosage should be reduced in paients with moderate to sevete renai insuriciency, all in patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects. Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline. Chiral disposition of the period of the period of the period of the patient method of the patient meth

growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Sately and effectiveness in children have not been established.

**Use in Elderly Patients*—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Afferse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled thats of over 1.900 installine, and over 1.300 on placebo, sweating (14% vs. 0.2%), urticaria (0.5% vs. < 0.01%), and somnolence (2.4% vs. 1.3%) were significantly more common with nizabdine. It was not possible to determine whether a variety of the session of the place common with nizabdine. It was not possible to determine whether a variety of the session of the place common with nizabdine. It was not possible to determine whether a variety of the session of the place of the place of the place of the decidence of the place of the place of the place of the decidence of the place of the

untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fall thrombocytopenia was reported in a patient treated with nizaddine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine—than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Mpresensitivity — As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensity reactions (eg., bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuncernia unassociated with gout or nephrolithiasis was reported.

**Eosinophilia, lever, and nauses related to nizatidine have been reported.

Overflosage Overdoss of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Penal dialysis does not substantially increase clearance of nizatidine due to its large volume of distribution.

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NZ-2943-B-149347

Additional information available to the profession on request



Eli Lilly and Company Indianapolis, Indiana 46285

YOCON YOHIMBINE HCI

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it, however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug. 1,2 Also dizziness, headache, skin flushing reported when used orally. 1,3

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence. 1,3,4 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to $\frac{1}{2}$ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.3

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

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Abdominal Gunshot Injuries in Children

JOHN A. VAN AALST, B.A.; WALLACE NEBLETT, M.D.; and JOHN A. MORRIS JR., M.D.

Case Report

A 14-year-old black boy was shot with a 25-caliber handgun in the abdomen from close range; the bullet entered the right upper gastric area and exited from the left lower thoracic area.

Upon presentation to the emergency room, the patient was alert and oriented, with labored respirations. His blood pressure was 180/110 mm Hg, his pulse 85/min. X-rays revealed pleural fluid in the left chest and a markedly dilated stomach. Exploratory laparotomy showed that the projectile had pierced the right lobe of the liver and exited the posterior left lobe, then entered the lesser curvature of the stomach at the gastroesophageal juncture. From there, the bullet penetrated the lesser sac 2 cm from the greater curvature, traversed the hilum of the spleen, and passed posterolaterally through the left hemidiaphragm. Exploration revealed considerable blood in the peritoneal cavity and the lesser sac. The spleen was actively bleeding, and there was evidence of a left pneumothorax. The other abdominal viscera appeared uninjured.

With completion of rapid peritoneal exploration, the lateral peritoneal splenic attachments were incised, allowing anterior reflection of the spleen. The gastric vessels were ligated, and the splenic hilar vessels were suture ligated and divided, allowing completion of the splenectomy.

The stomach was initially explored by entering the lesser sac through the gastrohepatic ligament. The entrance wound of the projectile was clean, but necrotic tissue surrounded the exit wound, requiring debridement. Both perforations were closed in two layers using 4-0 silk sutures, followed by closure of the diaphragm with suture ligatures and placement of a left tube thoracotomy. The entrance and exit wounds of the liver were then sutured, and the splenic fossa was reinspected for bleeding sites; none was noted. The entire surgical procedure required administration of two units of blood.

The patient tolerated the procedure well and was subsequently transported to the pediatric intensive care unit where he received five days of antibiotic therapy. On postoperative day 3, the chest tube was removed, and two days later the nasogastric tube and liver drains were also removed. By postoperative day 8, the patient was ready for discharge.

Discussion

In 1987, firearms were the fourth leading cause of accidental death in children 14 years of age and under. During the four succeeding years gunshot injuries to children under 16 increased 300% nationally, with the number of gunshot fatalities showing a parallel increase.

By 1989, firearm murders to youths under 19 were up 23% from 1988, with records set in the under 5, 10 to 14, and 15 to 19 year-old age groups.²

On a more local note, between 1984 and 1990, 127 children (18 years of age and under) with gunshot wounds were admitted to the Vanderbilt Trauma Center: 6 in 1985 and 42 in 1990, representing a 900% increase since 1985.

Ten percent of pediatric (under 16 years of age) fatalities from gunshot injuries were from wounds in the abdomen.³ Among children with gunshot injuries, 12% in a cohort of under-10 year olds and 11.6% in a cohort of 15 year olds and under had abdominal injuries.^{4,5} In the second of these studies, 8/255 suffered splenic lacerations, 10/255 liver lacerations, 6/255 bowel perforations, 4/255 stomach lacerations, and 1/255 a pancreatic laceration. The mortality rate associated with these abdominal injuries was 4%.⁵

The indisputable increase in gunshot injuries to children and the corollary that approximately 12% of these injuries involve the abdomen, and are associated with mortality rates between 4% and 10%, make it imperative that the trauma community prepare itself for pediatric gunshot injuries to the abdomen.

In the present case, injury was sustained to the liver, stomach, spleen, and diaphragm; other organs were spared. Splenectomy was performed because of the severity of injury to the splenic hilum, though it is preferable in pediatric patients to retain the spleen because of its role in defense against infection by grampositive organisms. After completion of splenectomy, administration of a pneumococcal vaccine should be considered.

Initial concerns of the surgeons were directed toward identification of sources of abdominal bleeding. Given that a pediatric patient has a smaller blood volume than an adult patient, a proportionately smaller blood loss may prove more critical in a child than in an adult.⁵ There is a danger that the severity of blood loss may be underestimated if the pediatric patient is thought of as simply a small adult.

(Continued on page 547)

From the Division of Trauma, Section of Surgical Sciences, Vanderbilt University School of Medicine, Nashville.

A Woman With Massive Ascites

Case Report

A 34-year-old woman transferred to Vanderbilt University Hospital for consideration of liver transplantation was well until two months prior to admission when she noted jaundice and increasing abdominal girth. Her serum was positive for hepatitis A IgM, and a diagnosis of acute hepatitis A was made. Antinuclear antibodies, antimitochondrial antibodies, and hepatitis B and C serologies were all negative. The patient was treated with spironolactone and furosemide for her ascites. She took no other medications. Liver tests one month prior to admission revealed an aspartate transferase of 62 IU/L, alanine transferase 31 IU/L, alkaline phosphatase 216 IU/L, and total bilirubin 5.6 mg/dl.

Two days prior to transfer to Vanderbilt Hospital, the patient was admitted to another hospital complaining of nausea, vomiting, and back pain. Physical examination revealed massive ascites and edema, and cellulitis of the lower extremities. Because paracentesis suggested bacterial peritonitis, the patient was treated with antibiotics. During the next two days, the patient became febrile and progressively more lethargic, and she vomited coffee-ground material. She was

transferred to Vanderbilt Hospital.

On physical examination, the patient was lethargic. Her temperature was 95.5°F, pulse 130/min, respirations 40/min, blood pressure 75 mm Hg by palpation. Breath sounds were decreased. The abdomen was distended with fluid, and the left lobe of the liver was palpable. There was occult blood in her stool. There was 3+ pitting edema to the mid-tibia. The prothrombin time was 23 sec, albumen 1.8 mg/dl. The aspartate transferase was 125 IU/L, lactic dehydrogenase 273 IU/L, alkaline phosphatase 103 IU/L, bilirubin 6.1 mg/dl. The WBC count was 27,500/cu mm (81% segmented neutrophils, 2% lymphocytes, 2% monocytes, 5% myelocytes). The fibrinogen was 64 mg/dl. An arterial blood gas analysis revealed a pH of 7.23, Pco₂ 30 mm Hg and Po₂ 26 mm Hg. Chest radiograph revealed a right-sided pleural effusion with possible infiltrate.

The patient was intubated and a Swan-Ganz catheter was placed. Fresh frozen plasma (FFP), cryoprecipitate, and platelets and intravenous antibiotics were administered. Gastric endoscopy revealed esophageal varices from 25 to 40 cm, prepyloric mucosal erosions, and probable duodenal varices. Sclerotherapy of the esophageal varices was performed, and intravenous vasopressin was administered. An abdominal ultrasound suggested normal hepatic arterial and venous flow, but hepatic venogram showed narrowing of the intrahepatic inferior vena cava (IVC) and extensive hepatic venous thrombosis. CT scan showed hypertrophy of the caudate lobe. A mesenteric arteriogram demonstrated occlusion of the splenic, portal, and superior veins. A vena caval stent procedure was

The patient's mental status continued to deteriorate, and five days after admission she had an exploratory laparotomy. Extensive ischemic small bowel was resected, portal and mesenteric vein embolectomies were performed, and a 16-mm Gore-Tex mesoatrial shunt was placed. The patient received 21

Prepared by Nancy J. Brown, M.D., Hugh J. Morgan chief medical resident, Vanderbilt University Hospital, Nashville.

units of packed red blood cells, 34 units of FFP, and 30 units of platelets during the operation.

Initially the patient did well, becoming alert and responsive to commands, but during the ensuing two weeks she developed recurrent ascites, hypotension and anuric renal failure, and died. An autopsy revealed thrombosis of the portal, superior mesenteric, and splenic veins. The mesoatrial shunt anastomosis was intact. There was micronodular cirrhosis, and the hepatic veins were thrombosed, but the IVC was patent, and there were no pulmonary emboli. There was a possible thrombus in the left anterior descending coronary artery.

Discussion

Budd-Chiari syndrome describes a variety of conditions associated with outflow obstruction of the liver. Obstruction may occur at the level of the hepatic venous bed, the major hepatic veins, and the retrohepatic or suprahepatic vena cava. Obstruction may be caused by thrombosis, as in polycythemia vera, paroxysmal nocturnal hematuria, myeloproliferative disorders, and a variety of hypercoagulable states.1,2 Preexisting cirrhosis and prior hepatitis are both associated with an increased risk of hepatic vein thrombosis.1 Anatomic abnormalities of the vena cava, such as idiopathic membranous obstruction and congenital valve leaflets, may cause Budd-Chiari syndrome. Membranous obstruction of the suprahepatic IVC is most common in Asia.1 Neoplastic disease may cause obstruction either through hepatic infiltration or extrinsic compression. Veno-occlusive disease of the liver, characterized by concentric luminal narrowing in the terminal hepatic vessels and sinusoids, can cause Budd-Chiari syndrome following chemotherapy or the ingestion of pyrrolizidine alkaloid in tea.2

Typically, patients with Budd-Chiari secondary to hepatic vein thrombosis present themselves with the sudden onset of often massive ascites and tender liver enlargement.1 Liver function studies may be only mildly abnormal; serum albumen is typically low due to both decreased protein synthesis and protein loss into ascites. Left untreated, patients with Budd-Chiari syndrome develop progressive portal hypertension with esophageal variceal hemorrhage, end-stage liver failure, coagulopathy, encephalopathy, and renal failure.

A variety of noninvasive procedures has been used to diagnose Budd-Chiari syndrome. Of these, pulsed Doppler ultrasound shows particular promise; absent or reversed flow or a "flat waveform" in the hepatic veins confirms the diagnosis of Budd-Chiari with a sensitivity of 87.5%.3 Hepatic venography with inferior vena cavography remains the standard for diagnosis. Percutaneous liver biopsy may be done to determine whether or not the patient is a candidate for liver transplant.

Surgery remains the mainstay of therapy for Budd-Chiari syndrome due to vena caval or hepatic vein obstruction. A variety of portasystemic shunts has been employed to relieve portal hypertension and intrahepatic venous congestion. Recently, successful intrahepatic balloon-dilation of the hepatic vein and placement of an expandable metallic shunt between the hepatic and por-

tal veins has been reported.⁴ Patients with fulminant hepatic failure and cirrhosis should be considered for orthotopic liver transplant.

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Chickenpox in a Pregnant Woman

Case Report

A 28-year-old woman, pregnant at 29 weeks, was transferred to Vanderbilt University Hospital with chickenpox and shortness of breath. The patient was well until one week earlier when first she noted a vesicular rash. She knew of no exposure to chickenpox, but she worked as a janitor in a hospital. A toddler son was well. The patient gave a history of having had three spontaneous abortions.

One the day of admission, the patient complained of dry cough, shortness of breath, fever, weakness, and nausea and vomiting. She was admitted to an outside hospital and transferred to Vanderbilt Hospital the same day. Physical examination revealed a temperature of 100°F, pulse 136/min, blood pressure 110/50 mm Hg, and respiratory rate 36/min. The patient appeared ill, and had erythematous vesicular lesions on her face, posterior pharynx, and trunk. There were fine rales at the bases of both lungs. The uterus extended 28 cm above the symphysis pubis. Neurologic examination was normal. Chest radiograph showed bilateral, scattered, indistinct nodular infiltrates. Arterial blood gas analysis showed a pH of 7.41, Pco₂ 30 mm Hg, and Po₂ 79 mm Hg while the patient was breathing 4 L of oxygen/min through a nasal cannula. WBC count was 5,900/cu mm. Ultrasound studies revealed a viable 30-week-old fetus.

The patient was intubated, and given intravenous acyclovir, with cefotaxime for possible secondary bacterial infection. Premature contractions were treated with indomethacin, and the fetus was monitored.

On the third hospital day, when there was evidence of fetal distress, the patient was allowed to go into labor. She delivered a 1,710-gm baby girl with Apgar scores of 6 and 8. The infant was intubated and given varicella zoster immune globulin (VZIG). She was extubated on the same day and given oxygen for eight hospital days. She was discharged at a weight of 1,930 gm on the 23rd day postpartum.

The patient's postpartum course was complicated by fever and increasing hypoxia, and on the eighth hospital day she developed a dense left-sided hemiparesis. CT scan of the head showed a nonhemorrhagic infarct involving the right basal ganglion and internal capsule. CSF was normal. Transesophageal echocardiogram with a bubble study was normal. Anticardiolipin antibody was positive. Protein C activity and antigen, protein S antigen, and antithrombin III levels were all normal, and antinuclear antibody was negative.

On the 18th hospital day, the patient was extubated, and is now undergoing rehabilitation, with physical, occupational, and speech therapy.

Discussion

Chickenpox (varicella) is a common and highly communicable infectious disease. It is communicable for one to two days before and five to six days after the onset of rash; the incubation period is approximately 14 days. Although adults account for only 2% of cases, they account for 24% of the deaths due to varicella. The incidence of the disease during pregnancy is 1 to 5 per 10,000 pregnancies.²

The complications of chickenpox in pregnant women appear to be similar to those in the adult population at large. About 14% develop pneumonitis (characterized by dyspnea, fever, pleuritic chest pain, and pulmonary infiltrates) one to six days after the onset of rash.³ The mortality rate is 3%. Though intravenous acyclovir is recommended for the treatment of varicella pneumonia, its efficacy in the treatment of normal hosts has not been established by controlled trials.³

Neurologic complications of primary varicella infections are rare (0.1% to 0.75% of cases). They include diffuse meningoencephalitis, acute cerebellar ataxia, ascending or transverse myelitis, aseptic meningitis, Guillain-Barré, and encephalopathy with fatty infiltration of the liver (Reye's syndrome). Six cases of delayed

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hemiparesis have been described following chickenpox in children.⁴ In at least one of these, arteriogram showed focal angiitis. The presence of anticardiolipin antibody and history of spontaneous abortions suggest a coagulopathy as another possible etiology for stroke in this patient.

Fetal involvement depends on the timing of maternal infection. A fetal varicella syndrome has been described in 2.3% of infants whose mothers contracted varicella during the first trimester of pregnancy.2 The stigmata that may occur include intrauterine growth retardation, limb hypoplasia with dermal scarring, malformed digits, central nervous system manifestations (retardation, cerebellar and cortical atrophy, seizures), microphthalmia, cataracts, and chorioretinitis. Peripartum infection of the mother carries a high risk of neonatal morbidity and mortality. One-third of infants born within five days before or two days after onset of maternal rash develop chickenpox.² Complications include skin lesions, pneumonia, uncontrolled bleeding, and hepatic involvement. The severity of neonatal disease during this period results from a lack of passive immunity.

The American Committee on Immunization Practices (ACIP) recommends that 125 units of VZIG be given to all neonates born between two days and five days after the onset of maternal rash. One prospective study of 41 infants exposed to maternal varicella in the perinatal period and treated with VZIG reported a 0%

mortality rate.⁶ Case reports of infants who have contracted severe varicella in spite of receiving VZIG have prompted Great Britain to recommend a dose of 250 units.⁷

Pregnant women exposed to varicella should be tested for susceptibility. In one prospective study of 778 pregnant women exposed to varicella, 724 (93.1%) were found to be immune. Although the ACIP does not currently recommend routine administration of VZIG to exposed adults, VZIG has been shown to prevent or attenuate the course of varicella when given within 96 hours of exposure. A live attenuated varicella vaccine has been tested and proven efficacious. Licensure is pending. In the future, administration to women prior to pregnancy may prevent the congenital varicella syndrome and perinatal varicella.

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Trauma Rounds . . .

(Continued from page 544)

Other general considerations in pediatric patients are that a child's abdominal contents are less adequately protected with subcutaneous tissue and muscle than an adult's, and are therefore more susceptible to injury.³ The abdominal organs of a pediatric patient are more compactly fitted into the peritoneal cavity, leading to increased likelihood that a greater number of organs will be injured.

Children have less respiratory capacity and reserve than adult patients, leading to the increased possibility of complications.⁵ A child's airway is fragile, increasing the risk of earlier occlusion and increased difficulty in airway maintenance. Endotracheal intubation may therefore be more difficult than in an adult patient. Additionally, medical dosages and intravenous access for fluid replacement during pediatric surgical procedures differ from those of adult patients with similar injuries.⁵

These differences should be considered when treating pediatric patients with abdominal gunshot injuries.

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Platelet-Activating Factor Attenuates Muscle Amino Acid

JEFFREY S. BORUFF and MICHAEL D. KARISTAD, Ph.D.

We have shown that system A amino acid (AA) transport in skeletal muscle is decreased in injury and that the administration of a platelet-activating factor (PAF) antagonist to burn/endotoxin injured rats decreased urinary nitrogen excretion and improved nitrogen balance, which suggested an involvement of PAF in the protein catabolic response to trauma. An inhibition of AA transport could contribute to the loss of protein by limiting protein synthesis in skeletal muscle.

incubated for 40 minutes in Krebs-Ringer bicarbonate buffer (37°C; 95% O₂-5% CO₂) containing 1-¹⁴C-alpha-aminoisobutyric acid (AIB, AA analog), ³H-inulin, and 0 (basal) or 100 mU/ml insulin. Na⁺-free media assessed Na⁺-independent AIB uptake. The rate (nmol·gm dry wt⁻¹·40 min⁻¹) of AIB uptake by muscle was corrected for uptake into extracellular (inulin) space. Mean values (±SE) are shown in the Table.

Identical AIB uptake in Na+-free media in both con-

TABLE

	Basal	Insulin	Insulin-Basal	Na ⁺ -Free
Control	6.0 ± 0.3 (10)	8.6 ± 0.9‡ (12)	` '	0.48 ± 0.13 (10)
PAF	4.2 ± 0.2 (12)†	6.9 ± 0.4‡§ (12)		0.53 ± 0.11 (8)

^{(), #} of muscles

This study investigated the effect of PAF on basal and insulin-stimulated sodium-dependent neutral AA transport by system A in soleus muscle. Fasted male Sprague-Dawley rats weighing 75 to 100 gm were injected IV with saline or PAF, 4 μ g/kg, and killed one hour later. Soleus muscles (40 mg) were removed and

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trol and PAF muscles indicates that the 30% reduction in basal AIB uptake by PAF muscles was due to an alteration of system A Na+-dependent AA transport. The absolute increase in insulin-stimulated AIB uptake was the same in control and PAF muscles, although the maximal response was lower in PAF muscles, indicating a reduced insulin effect. These results provide additional evidence that alterations of protein and amino acid metabolism following injury are mediated by PAF.

TENNESSEE MEDICAL ASSOCIATION

157TH ANNUAL MEETING
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 $[\]dagger P \leq 0.001$, vs control (basal)

[‡]P ≤ 0.0001, vs basal

[§]P ≤0.05, vs control+insulin

Radiology Case of the Month

STEVEN M. WEINDLING, M.D.; CHARLES L. ROBINETTE JR., M.D.; and ALFRED S. CALLAHAN III, M.D.

Case Report

A 38-year-old man had a history of childhood seizures previously well controlled by phenytoin sodium (Dilantin). When he recently experienced recurrent seizures, his Dilantin level was found to be subtherapeutic.

MRI coronal T2-weighted (TR 2800; TE 90) spin echo images revealed a horizontally oriented cleft extending from the right cerebral cortex to the lateral ventricle (Fig. 1). A 2.0×1.5 cm lobulated, well-defined, non-enhancing mass at the medial cleft compresses the right lateral ventricle. This mass demonstrates signal intensities equivalent to cerebral cortex on proton density (TR 2800; TE 30) and T₂-weighted spin echo (Figs. 1 and 2), and postcontrast T₁-weighted axial spoiled volume gradient echo (TR 24; TE 5; FA 35) (Fig. 3) images.

What is your diagnosis?

- (1) Astrocytoma
- (2) Posttraumatic change
- (3) Old cerebral infarct
- (4) Schizencephaly with heterotopic gray matter

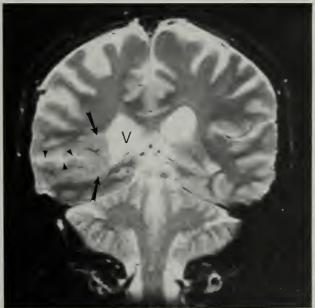
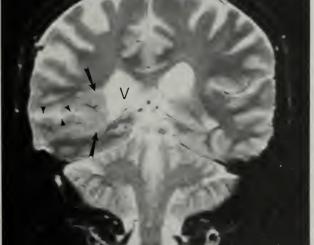


Figure 1. Coronal T2-weighted spin echo image demonstrates a horizontal CSF cleft (arrowheads) extending centrally from the cortex. A well-defined mass (arrows) at the medial cleft compresses the lateral wall of the right lateral ventricle (V).



From Radiology Consultants, Inc. (Drs. Weindling and Robinette) and Neurologic Consultants, P.C. (Dr. Callahan), Nashville.

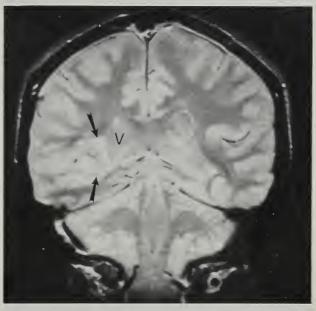


Figure 2. Coronal proton density weighted spin echo image (paired image of Fig. 1) again reveals the mass (arrows) compressing the right lateral ventricle (V). The predominant signal intensity of the mass is equivalent to cerebral cortex.



Figure 3. Postcontrast axial spoiled volume gradient echo image shows the mass (arrows) signal intensity to be equivalent to cerebral



Figure 4. Coronal T₂-weighted spin echo image from a patient with type II schizencephaly. Note the narrow CSF cleft (arrowheads) extends from the cerebral cortex all the way to the ventricle (V).

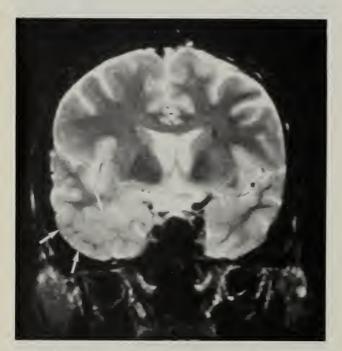


Figure 6. Coronal T_2 -weighted spin echo image anterior to the schizencephaly demonstrates polymicrogyria (arrows).

Discussion

Schizencephaly is a developmental brain abnormality in which abnormal neuronal migration results in full thickness clefts within the cerebral hemispheres. There is no proven etiology for this abnormality, and proposed theories include a genetic factor and a first



Figure 5. Axial T₂-weighted spin echo image from the same patient as shown in Fig. 4 reveals a contralateral type I schizencephaly. The CSF cleft (arrowheads) appears to fuse prior to reaching the ventricle (V).

trimester ischemic event.^{1,2} Schizencephaly may be categorized into clefts with fused lips (type 1) and those with separated lips (type 2).3,4 These gray matter-lined clefts may be unilateral or bilateral (Figs. 4 and 5). The cortical gyral pattern adjacent to the cleft is usually abnormal, demonstrating polymicrogyria (Fig. 6) or pachygyria.5 Heterotopic gray matter frequently lines the ventricle at the medial cleft, and is present in our patient (Fig. 3). Additional associated developmental abnormalities include absence of the septum pellucidum (80% to 90% of cases)6 and septo-optic dysplasia.2 Clinically, seizures are frequently associated with schizencephaly. Neurologic impairment is related to the amount of brain involved, and varies widely from normal intelligence to severe retardation. Spastic diplegia is often present in severe cases.2

Cerebral astrocytomas frequently have new onset seizures. This patient's history of seizures since childhood would make this diagnosis unlikely. Furthermore, gliomas, as infiltrating white matter tumors, demonstrate poorly defined margins on MR images and are frequently surrounded by vasogenic edema. With the exception of necrotic or hemorrhagic regions, gliomas appear hypointense on T₁-weighted and hyperintense on T₂-weighted spin echo MR images. Astrocytomas are frequently enhanced following ad-

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Good Science—Bad Luck?

J. KELLEY AVERY, M.D.

Case Report

A 41-year-old professional with extremely close connections with the medical community became ill with fever and generalized muscle aching three days before his wife took him to the hospital emergency room (ER) about 8:30 pm. On that day she had noticed some inappropriate speech in addition to the chills, fever, nausea, and vomiting he had been having for the preceding two or three days. He had taken Compazine 5 mg five times over the preceding 12 hours. He had seemed withdrawn and depressed. The evaluation by the ER physician revealed generalized hyperactive reflexes and occasional myoclonic jerking of the extremities. Even though the patient had walked into the ER, he was found to be disoriented to time and place. He did know his wife. Based on his evaluation, the ER physician called the primary care internist who asked that a consulting neurologist be called in.

The neurologist performed a lumbar puncture, which was difficult and initially described as bloody, but cleared as the fluid dripped. There was no noted increase in CSF pressure, and the specimen was sent to the laboratory for studies.

In his "Neuro Note," the consultant documented some total body stiffness with occasional myoclonic jerks. The reflexes were said to be 3+, with some mild clonus at the ankles. His impression was "Depression; rule out encephalitis."

The patient's doctor, the internist, came to the ER and examined his patient. He wrote an admission note basically repeating previously documented information. He added the patient's history of asthma and the fact that steroids by inhalation and oral theophylline had been used regularly in his treatment. He added that while the patient followed appropriately with his eyes, the speech was guttural, monosyllabic, and not connected. He reported that the CSF glucose/protein was normal. Few cells were present but two lymphocytes were counted. His diagnosis was "cerebritis vs. psychosis."

When the patient arrived on the floor about four hours after getting to the ER, the nurse described a seizure lasting about two minutes, with the patient becoming stiff and purplish. The neurologist was notified about her observations and ordered benadryl 25 mg IV. Because of the patient's severe myoclonic movements and seizures, the nursing supervisor applied restraints to the upper extremities. Throughout the night the nursing notes recorded "neck and lower extremities more rigid," again, "restless with outbursts."

The neurologist reevaluated the patient about 8 AM and reported an abnormal EEG with "high voltage slow/sharp." The CSF report was more complete but added little to the information. The consultant believed that the best possibility was encephalitis due to herpes. A consultation with an infectious disease (ID) specialist was ordered. The seizure activity was confirmed, Dilantin was ordered, and the patient was moved to ICU.

The evaluation by the ID specialist agreed with the pos-

sibility of herpes encephalitis and started acyclovir empirically. Through the next 24 hours the seizures were largely controlled but with difficulty. The patient's inappropriate behavior continued, and the fever went to 103°F. The nurses' notes mentioned the patient grimacing with pain, still showing muscular stiffness, and talking in short, unintelligible phrases.

The following morning the patient looked better but was noted to have swelling about the shoulders, with severe pain on any movement of the arms. X-rays made late in that same day showed bilateral fracture dislocations of the shoulders that required reduction and pinning of the greater tuberosities. The orthopedic consultant called in to correct these injuries did so without significant difficulty.

Improvement continued with the patient becoming progressively more lucid and conversational. The patient was discharged one week after admission, requiring many weeks of physical therapy, and still has not regained normal motion in his upper extremities. While he has recovered a great deal of his mental capacity, there persists significant cognitive difficulty. Two months after entering the hospital the patient wrote to the neurologist, stating that his degree of physical impairment and his residual memory and other cognitive difficulties made him totally disabled under the terms of his disability insurance coverage. He enclosed a form for the physician to complete attesting to this fact. More than a month after the request, the neurologist wrote, regretting the delay but stating that the disability would depend on testing more sophisticated than could be done in a neurologist's office. He suggested that arrangements would be made for those tests by a psychologist.

A lawsuit was filed within the year of our patient's admission to the hospital, charging both the neurologist and the internist with failure to prescribe antiseizure medications in a timely manner, failure to timely and aggressively treat the seizures that developed, and charging the hospital with applying restraints without a specific physician's order. In the very expensive lawsuit that followed, a jury rendered a verdict against both the hospital and the neurologist. A very large award was given.

Loss Prevention Comments

This was a very difficult case to evaluate. On two occasions, the medical records were thoroughly reviewed, and the peer group involved failed to find significant deviation from an acceptable standard of care by the neurologist. The internist had been dismissed earlier in the litigation. Based on the testimony at trial, the jury felt strongly otherwise!

There was a 12-hour delay from the time of admission to the ER before antiseizure medication was prescribed. Why was this? The question is valid in view of the fact that every physician who saw the patient described seizure activity. Is the resulting cognitive impairment a result of the disease alone, or did the patient

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Dr. Avery is chairman of the Loss Prevention Committee, State Volunteer Mutual Insurance Company, Brentwood, and associate director of Medical Affairs, St. Thomas Hospital, Nashville.

sustain some cerebral hypoxia that might have been prevented had medication been prescribed earlier to control the seizures? Did the nurse make a faulty judgment about the use of restraints? Throughout the first night there were multiple entries in the record describing thrashing about, irrational behavior, and seizures. The policies of the hospital allow its supervisory nurses to apply restraints when there is the belief that injury to the patient or hospital personnel will be prevented. It was the contention that dislocations of the shoulders would probably not have happened if there had been no wrist restraints.

These are questions that involved expert testimony on both sides of the issue. There were legitimate differences of opinion voiced by equally qualified experts. The jury, as juries frequently do, decided in favor of the injured patient.

There are equally relevant questions that could be asked about the conduct of this case that have little or nothing to do with the pure clinical issues presented by this patient. The wife was very angry! She saw the suffering of her husband, and nurses appearing to be impotent to do anything to help him. She was aware of the nurses' calls to the physicians. On the terrible night of admission (her perspective), where was the primary care internist? How much time did either he or the neurologist spend reacting to her absolute terror? Imagine: your spouse, a very bright and rising professional, becoming sick with what both of you thought was a simple viral illness that had been going through the family and suddenly becoming irrational, out of

contact with reality! You watch this suffering go on, first the seizures, then the problems with the shoulders, for what seems to be an eternity! Did either of her physicians share their own confusion with her and give her the assurance that they were walking this tragic trail by her side? After the ID specialist first examined the patient, there is a nursing note indicating that the physician spent a "long time talking with the wife." It is easy to conclude that this description is made against the backdrop of other physicians *not* spending significant time doing the same.

Should it have taken the neurologist over a month to reply to the patient's request for assistance with his application for disability? Did he know the details of the policy well enough to conclude that he, the neurologist, was not able, from his own knowledge, to attest to the disability of his patient? It is easy to come to the conclusion that, like many of us, there is a long delay with papers constantly piling up on our desks. In the circumstances that exist here, wouldn't it make sense to go out of one's way to accommodate this damaged man and his family?

We will never know how good or bad the "science" employed in this case was. We can only express an opinion. What we do know is that the jury, on hearing the evidence, like the wife became angry and expressed their opinion. The jury's opinion is what "goes to the bank!" Again, we must be impressed with how little we can do in some instances except express the concern, the warmth, the sincerity, the compassion that one human being owes another.

Radiology Case of the Month . . .

(Continued from page 550)

ministration of gadolinium DTPA, and this case reveals no enhancement.

The brain reacts to trauma with edema or hemorrhage. Acute cerebral contusion is associated with cerebral swelling, frequently contains petechial hemorrhage, and extends into underlying white matter. Chronic findings of cerebral contusion may include encephalomalacia (loss of brain substance), white matter shear injury, and hemosiderin deposition. No such findings are present in this case.

Old cerebral infarcts are characterized by encephalomalacia and gliosis. Brain loss is seen as enlargement of adjacent sulci CSF spaces, and parenchymal gliosis appears hyperintense with respect to normal brain on T_2 -weighted images. In our case, the brain ab-

normalities are isointense with normal gray and white matter

DIAGNOSIS: (4) Schizencephaly with heterotopic gray matter.

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Health Access Incentive Program in Retrospect

ANNETTE MENEES and RICHARD T. LIGHT, M.D.

In July of 1989 obstetrical services became available in the small south central Tennessee town of Waynesboro. Before that, it had been about 10 years since a baby had been delivered there. When Dr. Jana Marjenhoff opened her practice things changed. People in Wayne County would stop her on the street to tell her how glad they were that she was there. They even called her at home—just to be sure she was really there. Before "Dr. Jana" located in Waynesboro, many obstetrical patients would go as far as Columbia, Tenn., or Florence, Ala., both an hour's drive away. In order to make their doctor's appointment, some would have to take off from work for most of the day, and the travel was quite expensive.

Dr. Mark Clapp opened his practice in Jamestown, Tenn. (Fentress County) in September 1990. A family practitioner providing obstetrical care was a blessing to the local townspeople. Before Dr. Clapp opened his practice, some patients had to make the hour's drive to Livingston to see a doctor for obstetrical care. It's much more convenient for them having someone like him in town. Dr. Clapp once expressed the sentiments of probably a majority of rural America when he commented that many of his patients in Fentress County had lived there all their lives and they want to have their babies there as well.

In August 1989, Dr. Carl Wingo opened his family practice in Fayetteville, Tenn. (Lincoln County). Since opening his doors, Dr. Wingo has delivered over 200 babies. In July of this year, Dr. Wingo will be taking a leave of absence to pursue a second residency in obstetrics at Vanderbilt. He will return to the community as the only obstetrician in Lincoln County and will be even more valuable to his patients.

These three physicians have more than one thing in common. They are all family practitioners. They all provide obstetrical care. They have all established their practice in rural, medically underserved areas of Tennessee. And they are all participants in Tennessee's Health Access Incentive Program.

From the Tennessee Department of Health, Nashville, Annette Menees is the director of manpower development for the TDH Bureau of Health Systems Development and Dr. Light is chief medical officer for the state of Tennessee.

In the spring of 1989, Governor McWherter signed legislation creating Tennessee's Health Access Incentive Program. This program, a component of Governor McWherter's Indigent Care Proposal, is one of the most aggressive and innovative programs in the country, effecting access to health care for all citizens.

The legislation was born from the findings of Governor McWherter's Indigent Care Cabinet Council, which was charged with studying the issue of indigent health care in Tennessee. After meeting and talking with various groups across the state, the Cabinet Council found the following:

- No one group or entity was concerned solely with indigent care,
- Many areas of the state have no health care providers,
- Many areas have an inadequate number of providers serving indigent patients, and
 - Many people cannot pay for health care services.

From these findings came two pieces of legislation that have provided a tremendous mechanism by which to address these concerns: the Health Access Act and the Community Health Agency Act.

The Health Access Act of 1989 provides a mechanism for addressing Tennessee's inadequate number of providers. This legislation authorized the creation of a special account, the Health Access Incentive account, which made resources available for the development and implementation of programs designed to encourage the location of practitioners such as Marjenhoff, Clapp, and Wingo in areas of the state having an inadequate number of primary care physicians. This special account required no new state dollars; funds are allocated from the state's abandoned property account.

Incentives provided through the Health Access Incentive Program include loan repayment of up to \$50,000 to repay outstanding education loans, start-up grants of up to \$25,000 for the purchase of equipment, a \$5,000 locum tenens payment for solo physicians, and technical assistance and practice subsidies. These incentives are provided to primary care physicians (family practice, obstetrics, general internal medicine, and general pediatrics) establishing new practices in under-

served areas for an obligated period of 2½ years. An extended term incentive of \$50,000 plus interest is also available for those who have successfully completed a 2½-year obligation and are willing to remain in their practice for an additional five years.

Incentives are also available for eligible certified nurse practitioners and physician assistants precepted by a primary care physician.

The Community Health Agency Act of 1989 established Community Health Agencies (CHAs) across the state. In the development of the CHA concept, one of the purposes was to coordinate the various private, public, state, and federal entities in developing programs and mechanisms to enhance health care delivery within each region. Tennessee is divided into 12 community health regions—eight rural and four urban. Each CHA has a community-based board that is responsible for the coordination of health care within its particular region of the state. Each CHA is charged with the task of assessing needs of communities within its region. From this assessment, manpower needs are determined. A recruitment and retention committee of the CHA then works with both state and local entities in identifying appropriate practitioners for its various primary care opportunities. Health Access dollars are awarded to a physician only upon the recommendation of the CHA.

An activity that has proven very beneficial in identifying excellent candidates for our underserved areas, both rural and urban, is Tennessee's Annual Medical Recruitment Fair, which is held in September. Second and third year primary care residents from the southeast who have been recommended by their residency director are invited to participate. These residents are given the opportunity to discuss current and future practice opportunities with representatives from Tennessee's underserved communities. Information explaining the Health Access Incentive Program is available at the Fair. Of the residents completing their training in 1991 who attended the Recruitment Fair last year, more than 65% have decided to locate in Tennessee.

As of June 1, 1991, 45 primary care physicians, two psychiatrists, and six mid-level practitioners have received support through the state's incentive program. By specialty there were 30 family practitioners (10 of whom provide obstetrical services), 7 internists, 4 obstetricians, 4 pediatricians, 2 psychiatrists, 5 nurse practitioners, and 1 physician assistant.

Thirty-eight counties have already benefited from the services of these providers, and applications in process could have an impact on an additional nine counties. In other words, almost 50% of Tennessee's counties will have benefited from the placement of these health care providers since July 1989. One way in which they benefit is that physicians who have been

placed through the Health Access Incentive Program have agreed to see all patients regardless of their ability to pay.

In addition to placing new physicians in underserved areas to address indigent care needs, various CHAs have made it a priority to recruit physicians who are currently in practice and willing to provide services to medically indigent patients within their communities. This initiative is referred to as the Designated Volunteer Program. "Volunteer" physicians agree to incorporate into their practice patients whose income is below 100% of the federal poverty level and have no Medicaid, Medicare, or third-party insurance coverage. Physicians enrolled as Designated Volunteers may elect to receive a small grant to cover ancillary costs incurred as a result of the visit. They may also choose to have state-provided malpractice protection when serving indigent patients. The Designated Volunteer Program was actually based on the Tennessee Medical Association's (TMA) Medical Home Program, which was established in 1984 for children and expanded to medically indigent adults in the spring of 1987.

While these programs have brought about tremendous strides in access to care, they are by no means the total solution to Tennessee's health access needs. The state alone cannot be expected to continue to provide these financial incentives within all underserved areas at the current level of funding. There are some areas of the state that do not have adequate resources in place by which to recruit and retain medical providers. In the future, the state will need to focus its resources in these areas. On the other hand, communities that have more resources available must initiate more aggressive methods of attracting appropriate providers. Simply put, it will take all entities—private, public, state, and federal—each doing its part to tackle the issue of health access for all people.

Appropriate health care should be available to all citizens, but in so many cases it has become a privilege only to those who can afford it. Tennessee is moving in the right direction to effect change. Through Governor McWherter's leadership, we have implemented one of the country's most aggressive financial incentive programs; we have developed, through the CHAs, a mechanism through which to address issues at the local level, and we have coordinated a system of care for all the people through the private physicians' Designated Volunteer Program, TMA's Tennessee Medicare Access Program, and TMA's Medical Home Program. With all these programs working together, the problem of access to care becomes an opportunity where we can focus our efforts and showcase our successes.

For more information regarding Tennessee's Health Access Incentive Program, please contact Annette Menees at (615) 741-7308 or (800) 659-3010.

Dealing With the Media: Be Prepared for the Interview

ROBERT BOWERS, M.D., Chairman
TMA Communications and Public Service Committee

Good news and bad news: The good news is you have just been asked to share the physician's perspective on a particular medical issue through a newspaper or television interview. The bad news is you are worried about your lack of media interview experience. But as this article will show, you have little to worry about if you are prepared.

How News Becomes News

When is a story "newsworthy"? A news story is generally a recent event that has general interest to an audience or is unusual and notable. It is the reporter's job to track down that information and present it to the public in the form of a news story. Or a public relations agency may promote a story to a news agency in the form of a press release, which includes contact information in case the reporter has further questions. Either way, if the story is from your particular medical specialty, you could become the reporter's resource. And that's a great catbird's seat to be in.

Even though the reporter includes you in the interview, you might not make it in the final story. Sometimes there is insufficient space to quote everyone. Or your information may be redundant to another expert, and the reporter will not use your quote. That's the reporter's editorial decision. And that's the chance you run when spending time with a reporter.

But the payback in exposure when you are cited is tremendous!

Our CARE program has been instrumental in gaining positive coverage of physician issues by using public relations resources to promote physician-related information. The CARE committee has provided media training to about ten physician members who serve as the spokespersons across the state for the program. Four times this year, we are actively soliciting coverage on the physician's side of topics that would be of interest to the general public.

These efforts have garnered positive publicity on several issues. During the TMA's annual meeting in Memphis, for instance, more than 50 media stories were

generated across the state through newspaper, radio, and television interviews by various TMA members. Those stories don't appear by magic. The media doesn't call the TMA and say, "What can we write about you today?" Rather, the TMA communications staff and our public relations agency developed story ideas and coordinated efforts with the media to get the TMA name out to the public in a positive light.

Some Advice for Being Interviewed

Being interviewed by the media can be a very good opportunity for you to take medicine's message to the public. Having the media print or air your comments gives great credibility to the message. It is perceived as an endorsement by an independent third party. It's up to you to be prepared for the interview.

So, how do you go about preparing for an interview? First, find out all you can about what the reporter is looking for, why he is doing the story, and what angle he is taking. Ask the reporter these questions and ask yourself if you really want to do the interview. If you feel uncomfortable with the subject, then politely decline to be interviewed.

There are two kinds of television interviews and two kinds of newspaper interviews. For television, there is a breaking news story or a talk show. In a breaking news story situation, a reporter will ask you several brief questions and you need to answer them with short, succinct answers. On a talk show, usually the subject is not controversial and your answers can be longer. A newspaper story is similar to television. Either a reporter will be on deadline and ask you a few questions for tomorrow's paper, or you will be asked more in-depth questions for a feature in next week's paper.

Here are some general pointers to remember when you are working with the media:

- Never lie to them, or you risk losing your reputation as well as that of your profession.
- Don't get angry, because that's what will appear in the story. Stay calm.
 - Be helpful, but don't guess at answers you aren't

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sure of. Admit you don't know, or say you'll find out.

- Don't ask to see the story before it runs or airs. You can offer to respond to any questions they may have after putting the story together.
- Don't be condescending, but don't talk medical jargon either. Find the middle ground, especially when dealing with very technical subjects. Keep your responses simple. Remember who will be watching or reading the material.
- In a TV news interview, keep your responses brief. Limit your answers to 10 or 15 seconds. For a talk show, your answers can be longer, but remain focused.
- There may be a microphone attached to you and a tape recorder on the desk. Even if both are turned off, never say anything off the record. There is no such thing as "off the record." A reporter can use anything you say.
- Generally look at the reporter rather than the camera. The camera operator will show your faceyour job is to answer the questions. And don't look down. It will make you look nervous. Practice in front of a mirror.
- Be friendly and confident. Especially with a TV interview, it shows you're in control and believe what you're saying.

- If there's a silence, you don't have to keep talking. In fact, this is a trick reporters will use to get you to tell more than you want to. When you have completed your response, just stop talking. It's the reporter's job to keep the interview going.
- Find out beforehand what the story is about and what questions the reporter will ask. You'll be able to think about your answers and pull together any background information that might help.
- As soon as a reporter has contacted you, respond to his inquiry. Reporters are on tight deadlines and need an immediate response. If you don't respond quickly or aren't reliable, the media will not call you again for your expertise.
- Let the reporter know where you can be reached in case there are any follow-up questions.
- Repeat the message you want to get across whenever you get the chance.

Working with the media can be both exciting and frustrating. It just takes planning and preparation to enjoy the triumph and avoid frustrations. Remember, reporters are like anyone else: they are trying to do a job, be recognized by their peers, and advance. As a medical expert, you can assist them in their endeavors.

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AMA Inititates Campaign to Strengthen Bond Between Physicians and Patients

This August, four physicians spoke directly from their hearts to 73 million Americans—about their work, their patients' needs, their dedication to their chosen profession and the health of America, and their appreciation for the American Medical Association.

Their words will be captured on the pages of *Time*, *Newsweek*, and *U.S. News and World Report*, through a special communications program sponsored by the AMA.

The campaign will present profiles of member physicians "making a difference for their patients, for all patients," explains James S. Todd, M.D., AMA executive vice president. "These champions of professionalism are upholding the highest standards of our profession, helping those most in need."

The four AMA member physicians profiled in the campaign are:

- Dr. Kenneth R. Haller, a pediatrician in East St. Louis, America's fourth poorest county.
- Dr. Aliza Lifshitz, an internist, one of the first Hispanic physicians to become involved in the AIDS problem in Los Angeles.
- Dr. Kevin J. Fullin, a cardiologist, who helps support a battered women's shelter in Kenosha, Wis.
- Dr. Paul A. Volberding, in San Francisco, devoted to research to extend the lives and ease the suffering of AIDS victims.

"The goal of these profiles is to strengthen the bond between physicians and patients and among physicians themselves," notes Dr. Todd. "They demonstrate to members and non-members alike that the AMA is meeting its obligation as advocate of our profession. And they demonstrate to all the quality of physician that the AMA attracts to its ranks."

The campaign puts the spotlight on the AMA's Principles of Medical Ethics through the work of these four doctors.

Dr. Lifshitz' work epitomizes her belief in the Principles: "There are two standards by which I run my practice every day—to inform the public about health care and to participate directly in community improvement. My husband says that I'm an idealist. That it takes more than one person to change the world." She smiles and continues, "And I say, 'I guess I'll be one

busy person."

The physicians were selected on the basis of their efforts with one of the public health issues on the AMA's health care agenda: interpersonal violence, AIDS research and treatment, care of the underserved, substance abuse, and biomedical research.

Each profile follows a similar format. Starting with each doctor's personal agenda, they look at the larger public health issue, then provide an AMA resource for information on the topic.

As to his reasons for participating in the AMA's communications program, Dr. Fullin explains, "The only group that can speak on behalf of physicians is the AMA. Only a national effort can succeed in telling the story of all physicians, what we work at every day, what we hope to accomplish."

Collateral ads, focusing on these four physicians' reasons for joining the AMA, will appear concurrently in leading medical journals, including the *New England Journal of Medicine*, *Medical Economics*, the *Journal of the American Medical Association*, *AMNews*, and the various medical specialty *Archives*.

Also under development are office displays and brochures that explain why physicians join the AMA. Entitled, "Why I Belong," they are available without charge to AMA member physicians responding to coupons in the ads.

The ads will also provide non-members of the AMA a vehicle to join the more than quarter million member organization.

While the AMA's efforts often benefit member and non-member physicians alike, it is the support of the AMA's members who have made this communications program possible and who serve to benefit most from this campaign.

"To be an AMA doctor is to be a special kind of doctor," says John J. Ring, M.D., AMA president, "the kind of doctor who sacrifices for patients' good, the kind of doctor all Americans should want their doctor to be." The AMA communications campaign tells their story.

For information on becoming a member of the AMA, call the Tennessee Medical Association in Nashville at (615) 385-2100 now.



"As doctors, if we do the right thing at the right time, we can make a difference."

Dr. Kenneth A. Haller, Pediatrician, East St. Louis, Illinois, Member, American Medical Association

In one of the nation's poorest communities, Dr. Kenneth Haller is working not only to save children's lives, but to bring dignity to the lives of their parents.

He is the type of physician who brings distinction to our profession. He is the type of physician who upholds the highest ideals of medicine. He is also a member of the American Medical Association (AMA).

"I read the Principles of Medical Ethics of the AMA and was impressed by it. I'm proud to be a member," says Dr. Haller.

You are invited to join Dr. Haller and to join with him in his efforts to bring quality health care to those in need. Become a member of the American Medical Association today.

American Medical Association

Physicians dedicated to the health of America



Report of the Committee on Hospitals

JOHN R. NELSON JR., M.D. Chairman

The Committee on Hospitals met two times with its counterpart, the Tennessee Hospital Association Joint Liaison Committee, during the course of 1990-1991. These meetings were an important means of maintaining communications, exchanging information, and discussing differences and mutual interests.

Medicare continues to be a major focus. The committee maintains an ongoing view of the federal budgetary process from the initial recommendations by the administration through the sequestration process, if necessary, until final reconciliation. Hospitals continue to focus on restoring much of the proposed cuts in Medicare Part A while physicians have focused on legislation to reduce the so-called "hassle factor" as well as the moderation of reductions on Part B expenditures.

Of major mutual interest is the Medicaid program, with a focus on the state's budgetary woes. The Medicaid budget remains torn between huge increases in eligibility brought about by federal mandates and dramatically declining state revenue collections resulting in decreased overall state budgetary growth. Administration officials project that, if present trends continue, Medicaid will absorb 100% of state growth dollars by the year 2000. The current administration's policy is not to allow state funding for Medicaid to exceed the overall state budgetary growth. This gap is presently being filled by hospitals and nursing homes through license fees and donated funds. Physicians are expecting increased pressure to enact some type of tax on other providers to provide for any increases in reimbursement. Providers are fearful that, once provider funding for Medicaid is in place, state government will reduce the state appropriation by a similar amount.

Federal activities addressed by the committee include the National Practitioner Data Bank, legislation to require health care facilities to offer information on advance directives (e.g., living wills) prior to admission, and clinical laboratory regulations.

Organ procurement and the joint TMA/THA effort to encourage donation were a major focus of this panel. Proposed is a two-year program which includes increased organ donor awareness and education aimed at physicians and hospital administrators.

The fate of the ever-controversial Certificate of Need

This report was submitted to the Tennessee Medical Association House of Delegates, April 11, 1991, Memphis.

program continues to be the most divisive issue between physicians and hospitals. THA strongly supports the continuation of the CON program and has resisted TMA's efforts to restore the exemption enjoyed by private physicians' offices. THA contends that the program helps to control health care costs by limiting the amount spent on unnecessary facilities and to protect hospitals from unfair competition. TMA insists that the CON process has instead become a means of insulating existing facilities from competition.

Physician recruitment and retention efforts by state government also drew the committee's attention. The panel heard from the state's chief medical officer concerning incentives provided by the Health Access Act and distributed through the regional community health agencies.

State legislation was another area of common interest as the panel emphasized efforts to fund the Tennessee Comprehensive Health Insurance Pool through provider contributions. Other issues included independent practice for physical therapists, workers' compensation, medical records, triplicate prescriptions, and a bill to outlaw "most favored nation" clauses in PPO contracts.

The state Board for Licensing Health Care Facilities has a tremendous impact on both TMA and THA. The committee served to effectuate communication regarding staff privileges, including chiropractors, emergency medical services, civil rights regulations, and overhauling the Board's membership to increase consumer impact.

One of the more significant accomplishments of the committee has been to oversee the development of standardized voluntary guidelines for utilization review in Tennessee. Indeed, Tennessee's work has become the basis for emerging national standards and should soon be implemented with the formation of a nationwide registry of utilization review agencies.

Other significant topics included the Special Joint Committee to Study Health Care Costs and third party credentialling for new medical procedures.

Committee Members

John R. Nelson Jr., M.D., Chairman, Knoxville A. Roy Tyrer Jr., M.D., Memphis Mark A. Doyne, M.D., Nashville John R. Morgan, M.D., Chattanooga Boyce M. Berry, M.D., Johnson City George H. Wood, M.D., Knoxville George R. Mayfield Jr., M.D., Columbia William L. Moffatt III, M.D., Memphis



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"And I thought rehab was just a fancy name for therapy."



Dr. Karl Hatten doesn't work in rehabilitation, but he knows more about it than many so-called experts. He got his experience first-hand. As a nephrologist, he's spent more than 25 years helping patients deal with life-threatening diseases. But when he was hit by a stroke, he saw his own life hanging by a thread.

"Like many doctors, I had been

confused by all the physical therapy programs that refer to themselves as rehab," he says. "My experience at MMRC taught me there's a big difference.

"The staff was incredibly supportive. They set realistic goals for my recovery, and helped me regain my self-confidence." In six months as a patient Dr. Hatten learned more about rehab than in 25 years as a doctor. Now he under-

stands why MMRC is the South's leading rehabilitation center.

Today, he's back at work. With a fresh outlook on life. And a new perspective on rehabilitation.

Because when it's done right, rehab can do a lot more than repair a patient's body. It can even help a doctor see things more clearly.



prezident's page



HOWARD L. SALYER

Counting Our Blessings

November is one of those months that always triggers certain feelings in all of us. For some, it signals the beginning of winter; for others, it represents the start of the holiday season and the road toward Christmas and Hanukkah. However, for most people, November—with its Thanksgiving holiday—represents the month when we are prompted to look closely at our lives and give thanks for the many gifts we are given each and every day—family, friends, good health, and the numerous other positive influences that represent important components of our lives.

For example, during the last year, many of us watched the saga of Operation Desert Storm and were reminded once again that we needed to be thankful for the freedoms and opportunities that we—as Americans—have in this country. Among many other issues, we do not live under a dictatorship, we do have the right to express our opinions, and we have not had to face a military struggle on our own shores in almost 50 years.

In being reminded of our liberties in the United States, one of the things for which I am grateful is that we live in a country in which physicians have the freedom to work together for the common good—whether that is through research in the laboratories to develop new treatment modalities and advanced technology, legislation to address and protect the integrity of the patient/physician relationship, or programs that are designed to safeguard the way we practice medicine and enhance the care that we can provide our patients.

Organized medicine plays a key role in these and many, many other developments that make a positive impact on the medical care available in this country. You, as a member of organized medicine, provide ideas and actions necessary for making the AMA, the TMA, and the local associations a major force in shaping and enhancing the standards of health care available to the citizens of the United States.

Thank you for your talents, your time, your achievements, and your support.

Hal h Salyer 4.D.

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NOVEMBER, 1991

editorials

M/D 2000

You know what they say about lies, damn lies, and statistics. Well, if you look at the numbers only, the statistics will tell you that the membership of the American Medical Association (AMA) has experienced a steady growth over the years. That's where the damn lies come in. There is yet another set

of figures that will tell you something else about the AMA membership. Those figures are the percentage of doctors in the United States who are members of the AMA. They will tell you the other numbers are a snare and a delusion. The truth is that percentagewise the membership of the AMA has not increased at all over the past 20 years; it has remained static. So much for statistics.

The AMA, which is all of us members, thought that situation needed remedying, and so to remedy that situation the AMA has initiated a membership recruitment/retention program, herein referred to as "M/D 2000" because that is the way the AMA referred to it; the MD refers, quite coincidentally, not to doctors of medicine, but to "membership driven," which tells you where the initiative is to be centered. It is to be centered in you, its members. It is to you that the federation of which you are a part is turning to spread the word that the AMA is the place for all doctors to be, so that by the year 2000 at least 50% of all the doctors in the United States will have joined you there.

So far as this sort of thing is concerned, and by "this sort of thing" I mean joining up with one's colleagues for accomplishing one's ends in one's profession, I see doctors as being divided into five categories. There is a group, first, or maybe it should be last, comprising those who call down a pox on the houses of all organizations, and refuse to ally themselves with any of them. Those are the ultimate freeloaders. Another segment join their specialty organizations, but say the hell with the rest of medicine. "My specialty societies are the ones looking after my interests!" That is a short-sighted attitude, since the status of all of medicine as a profession is critical to the status of any of its parts. Then there are those who join organized medicine at the local level, but believe the AMA to be superfluous, and there are those who, on the other hand, take just the opposite view, and for the same reasons: they join the national but forsake the local. Finally, there are the exemplars, those who see the need for all levels of the federation, and see their specialty organizations as neither antagonistic nor competitive, but as supplementary.

The financial squeeze, of course, is on, and due to worsen, though the squeeze has been mitigated somewhat by the very AMA of which we speak. As the money tree begins to shed its leaves, everyone begins looking around for economies, and among those economies is the axing of memberships. In such a situation, adding new ones occupies, as you might imagine, a singularly low priority. It is up to those of us who have seen the light to spread it. The AMA is

in a unique position to influence the course of health care and the part medicine will continue to play in its delivery. No other organization is in a position to act as an umbrella for all of medicine. If there were no AMA, one would have to be invented, as indeed its founders recognized a century and a half ago. Only the AMA is in a position to negotiate for us all with government and other third parties. The AMA is doing all of that and much, much more for all doctors, and the non-members are accepting a free ride for a great many services that they take for granted.

Most of that, though, comes under the heading of staff or council functions, and that is not what the AMA is really about. That is where the other arm of the program M/D 2000 comes in: to present to the public that *real* AMA, the AMA that comprises its competent, caring doctors, the ones their patients—your patients—know and love, and hold, despite reservations about the profession generally, in such high regard.

As a Special Item in this issue of the Journal we carry a piece prepared by AMA staff outlining what this special initiative is all about, and what it is designed to do for you and your patients. We will also over the next months carry a series of ads prepared by AMA staff to further illuminate your thinking about your organization and its members, and to lend inspiration and fuel for your efforts toward strengthening your organization and the federation. I am assuming, I hope correctly, that every one of you is going to make such an effort. Show that you believe in the health of this nation and our profession by following the program along as it unfolds and acting on it. In so doing you will be playing your part in making the AMA the true voice of American Medicine, speaking 600,000 strong by the year 2000.

J.B.T.

Perfidy on the Potomac

Surprise! Surprise! The RBRVS ain't budget neutral, after all!

Anent some bother or other that arose during my stay in the Army, a very fine and upright gentleman who was CO of one of my duty stations told me that while I could trust him implicitly personally, I should never believe anything he told me officially, since it

took only a single small directive from the War Department to countermand any, or even all, existing policy. Actually, that was something everybody in the service took for granted, anyway. It has never ceased to amaze me, then, that people continue to take seriously things that are said or promises that are made by people in Washington, and that they seem incredulous when it becomes apparent they have been deceived, and even bilked.

Witness the current flap over the proposed Health Care Financing Administration (HCFA) regulations to implement the Medicare Relative Value Schedule (RVS), which as promulgated would result in a devastating 16% reduction in the initial conversion factor below that originally projected for use with the RVS in determining physician payments. The regulations impose a "behavioral offset" so as to make sure that physicians, who are considered by HCFA to be low, slimy creatures who are not to be trusted, cannot make up the difference by increasing the volume of services they render. It would seem it takes one to know one.

It would be pointless for me to pursue particulars here, since the "narrow window of opportunity" for the public (that's us) to attempt to influence the regulations has long since past. So why, you might ask, as indeed I asked myself, should I even bother writing about the matter at all? I decided I couldn't pass up the opportunity to take a potshot at a generally elusive, uncharacteristically exposed high-flying target that is hell-bent on befouling us bemused bystanders below, nor to point out that things are all happening precisely as I predicted time and again in these pages they would ever since discussions over the RBRVS began five or more years ago. In fact, many of us could see it coming from the time the U.S. gum'mint first stuck its hand in the till with Medicare 25 or so years ago. It has proved anything but the bonanza both medicine and the elderly envisioned; as the money tree withers, HCFA has become the bureaucracy's Trojan Horse, fouling both camps. (Anyone who has ever marched in a parade behind the horse cavalry will understand what I mean. The rest of you can doubtless use your imagination.)

During the negotiations with the Congress in which medicine committed itself to payment reforms, the doctors were assured that the RVS would be budget neutral, and would never be used as a cost-cutting device. It was seen by primary care providers as a means for correcting perceived inequities in reimbursement between "cognitive" and procedural care. It requires incredible naivete to believe that "negotiating in good faith" with the Congress means

anything more than simply baring one's body to be trampled on, and as I predicted, no one won anything at all; there were only losers, and that included everybody—not just the doctors, but their patients as well, particularly the elderly; all the rest were affected, too, to some degree, since whatever affects a doctor's practice affects every one of his patients. That includes, would you believe it, most of those in the Congress, too, which they seem conveniently to forget. (Thinking about it, I guess they all go to Bethesda, anyway, and get everything free, so that they don't have to worry about such trivial matters.) One would have thought it would have become apparent to everybody long before negotiations began that in dealing with Washington the only winners are those who happen to be "in" with the bureaucracy; some of those have been able, for instance, to sell the government such things as a toilet seat, and a cheap one at that, for thousands of dollars. Few of us are in a position to do that, and even fewer of us would even if we could, contrary to what HCFA and Mr. Stark apparently believe.

In defense of Congress in all of this, if weakness and ineptitude constitute any sort of defense, Congress is not master in its own house, and, except when it gets caught at not being, as in this case, likely could not possibly care less. Very few members of that body know anything at all about the entire matter of medical reimbursement, and unless they are senior citizens, probably don't care much. (In any case, they have now sweetened their retirement kitty to the point it doesn't matter to them.) The House and Senate depend upon their committees, who in turn depend upon their staff of petty, permanent, unsinkable bureaucrats, who are often in the business only of furthering their own careers. HCFA churns out regulations without regard to the intent of the legislators, and without recourse, it would seem, even from the Congress. As a presidential appointee, the Secretary is free to pursue his own private agenda, and does.

This time the Congress got caught with its hand in the proverbial cookie jar. Mr. Fortney (Pete) Stark, even though he has no love for the medical profession, became enraged that the Congress had been put in the position of having dealt deceitfully with medicine. I can't imagine how he could have thought it would turn out otherwise, since HCFA's action was a product of the system Congress itself initiated and fostered so that its own members, instead of having to tend to their knitting, could (can) go gadding about the international countryside at the expense of the taxpayers. Mr. Stark confessed, in fact, that his committee did not do its homework very

well, having failed to pay as much attention as it should have to the wording of the act. That should have come as no shock to anyone.

We shall see whether or not all of the potboiling and roiling that has been fomented in the hallowed halls comes to naught, as I suspect it will, since HCFA is proving intransigent. Still, for whatever it's worth, negotiations are continuing. The 16% has allegedly been halved, though the principle is, of course, unchanged. Maybe there is such a thing as only a slight slur or half an insult. Regardless of how you cut it, it means that in HCFA's view, doctors are still crooks—just cheaper ones.

What it all goes to show is that folks are willing to pay any price whatever for smoke and foolin' around and all those other bad goodies. But pay a fair price for fixin' the machinery they so carelessly, if not deliberately, broke? Forget it! They'll resort to anything, no matter how devious, to avoid it. They'd rather die first. Well—almost; and there, friends and colleagues, is the rub.

J.B.T.

Thanksgiving 1991

In my studied estimation there is no better incentive for Thanksgiving than having observed the view from the brink and not having had subsequently to check it out from below. I think I wouldn't have to exercise myself very much to convince you that that is precisely the situation in which the world, or at least the Western part of it, found itself after a precarious three-day perch there in mid-August, which as I write this was a sequence that began only a few days ago. It appears that everything is now squared away, but as that famous New York Yankees philosopher Yogi Berra once observed, it ain't over 'til it's over, and in international politics, unlike baseball, it seems that's never.

The world started this week by awakening to find that the machinations of eight horrid old men had precipitated it at the precipice edge, to which it was clinging, nails dug desperately in, peering fearfully down into the nether reaches and praying that it might be spared the experience of following Soviet President Gorbachev into it. Few thought there was any recourse. In the estimation of most, the situation in Red Square bore a striking resemblance to that in Tiananmen Square a couple of years ago, and

glastnost and perestroika appeared a hollow mockery, destined to slide down the tube. It didn't happen.

A colleague who had, in company with a whole lot of us, some military experience during World War II used to observe that "if you ain't got no discipline [pronounced dis-sip'-lin], you ain't got no army." The eight horrid old men who, speaking in the name of the united people of the Soviet Union, had placed the Soviet president under house arrest, found too late to their dismay and extreme discomfiture that the Soviet people united, in whose name they spoke, consisted of no more than a handful of equally horrid old men—perhaps some women too, but likely not many. As it turned out, the old men were not only horrid; they were also not smart. It would seem not to take any great perspicacity to figure out that staging a military coup requires as a sine qua non the support of the military. Instead of ensuring that support, the coup-ers simply assumed it. Unlike their Chinese comrades in arms a couple of years back, the Soviet soldiers, or at least the Russian soldiers, which were in this case the ones that counted, showed that they had little stomach for decimating their compatriots. In a demonstration of a lack of that dis-sip'-lin considered by my friend and colleague, in company, I should think, with military commanders regardless of persuasion, as necessary to success, Russian tank crews were seen dismounting their vehicles and joining the demonstrating civilian coupees. That is, of course, no way to prosecute a military action, so one did not get prosecuted; the coup-ers were de-couped, and the world breathed, and as of right now is still breathing, a deep sigh of relief. Whether it still will be by the time you read this is, of course, another matter, as the situation in the Soviet Union is at the moment far from stable. But for now the world's stock markets are jubilant.

Maybe you think that is no cause for Thanksgiving. If you don't care to indulge, all of my perceptions are that you have a lot of company. I haven't seen the Western masses on their knees with arms and faces upraised toward Heaven. On the other hand, maybe they just failed to comprehend the gravity of the situation, or if they did, perhaps it is just that they have been too busy setting things back in order—you know, getting the stock markets back up on their feet, so to speak, and important things like that. It may be, too, that they consider such public demonstration bad form, and relegate such niceties to their own private prayer closets. Or maybe they just think God had nothing to do with it, though it has always seemed to me a little incongruous, and I should think a little disheartening to God, that the numbers of those beseeching Him to intervene in

their behalf are greater by a whole order of magnitude than the numbers who seem to believe that He really did intercede after He did.

I, for one, am giving thanks to God that the present crisis was averted, and we are at least no worse off, so far as I can tell, than we were last Sunday morning. It would have taken no more than a minutely different turn of events to have left us infinitely worse off-even to the extent that no one would even have been left around to know about it. In case you haven't thought of thanking God for it, this will be a reminder of something you can do on Thanksgiving Day. If you think God had nothing to do with it, then you can thank Mr. Boris Yeltsin, whose presence and determination and dedication are, incidentally, among the things I devoutly thank God for. How else would you perceive God intervening on your behalf in such a situation? Donner und Blitzen? What better way than to pit a man with a soaring vision and mounted on Pegasus against a crowd of witless has-beens riding a worn out, sinking tub encrusted with the barnacles of a discredited ideology? That's what I think, but you go to your church, and I'll go to mine.

As for President Gorbachev, his lifetime of dedication to the Communist party has apparently caused him to miss the boat that he worked so assiduously to launch. It is sad, because it was he more than anyone else who allowed the people of the Soviet Union to discover that there was something better outside the confines of the Soviet Union and its restrictive system, and to believe that they could clasp it to their bosom and claim it as their own. Without that driving force, Boris Yeltsin would still be just another functionary, and the masses of Russian people shown tearing down the hammer and sickle and once again raising the tricolor before the Russian Parliament would instead still be looking over their shoulder to see if the KGB was looking over their shoulder.

J.B.T.



Happy Thanksgibing

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Taylor Farrar, age 77. Died September 17, 1991. Graduate of University of Tennessee College of Medicine. Member of Bedford County Medical Society.

Byron W. Frizzell, M.D., age 66. Died September 7, 1991. Graduate of University of Tennessee College of Medicine. Member of Washington-Unicoi-Johnson County Medical Association.

TMA Members Receive AMA Physician's Recognition Award

The following TMA members qualified for the AMA Physician's Recognition Award during August 1991. This list, supplied by the AMA, does not include members who reside in other states.

Physicians can receive the PRA certificate valid for one, two, or three years. For the one-year award, physicians report 50 hours of continuing medical education, including 20 hours of Category 1; for the two-year award, physicians report 100 hours of CME, including 40 hours of Category 1; for the three-year award, physicians report 150 hours of CME, 60 of which are Category 1.

Henry B. Brackin Jr., M.D., Nashville Walter U. Brown Jr., M.D., Nashville Pamela H. Bullock, M.D., Knoxville Ronald D. Caldwell, M.D., Bristol Jill F. Chambers, M.D., Nashville Thomas L. Clary, M.D., Oak Ridge Samuel H. Dement, M.D., Nashville Dolores M. Digaetano, M.D., Cordova Herbert S. Dodge, M.D., Memphis David J. Donahue, M.D., Memphis Brian P. Donovan, M.D., Johnson City R. James Garrison, M.D., Murfreesboro Randal O. Graham, M.D., Knoxville James M. Hudgins, M.D., Nashville C. Gary Jackson, M.D., Nashville Karl C. Jonas, M.D., Covington John E. Keyser III, M.D., Nashville Richard P. Leggett, M.D., Chattanooga Mohammed Moinuddin, M.D., Memphis James L. Nash, M.D., Nashville Henry P. Pendergrass, M.D., Nashville Rodney A. Poling, M.D., Columbia Samuel B. Rutledge, M.D., Nashville Benjamin G. Santos, M.D., Chattanooga Antonio Valdes-Rodriguez, M.D., Kingsport Frances C. Walker, M.D., Memphis David R. Watts, M.D., Nashville Gates J. Wayburn Jr., M.D., Nashville Roseanna A. Webb, M.D., Nashville Robert H. Williams, M.D., Chattanooga

Eugene Warner Gadberry, age 80. Died August 13, 1991. Graduate of University of Tennessee College of Medicine. Member of Memphis-Shelby County Medical Society.

Vonnie Artesia Hall, age 83. Died February 28, 1991. Graduate of University of Tennessee College of Medicine. Member of Memphis-Shelby County Medical Society.

James Andrew Mayer, age 84. Died September 10, 1991. Graduate of Vanderbilt University School of Medicine. Member of Nashville Academy of Medicine.

George L. Miller Jr., age 69. Died March 6, 1991. Graduate of University of Tennessee College of Medicine. Member of Memphis-Shelby County Medical Society.

Thomas Waddell Nichols, age 62. Died August 20, 1991. Graduate of University of Tennessee College of Medicine. Member of Memphis-Shelby County Medical Society.

John Frederick Rockett, age 54. Died June 13, 1991. Graduate of University of Tennessee College of Medicine. Member of Memphis-Shelby County Medical Society.

Henry Gordon Rudner Jr., age 66. Died May 6, 1991. Graduate of University of Tennessee College of Medicine. Member of Memphis-Shelby County Medical Society.

Sam Houston Sanders, age 90. Died March 14, 1991. Graduate of University of Tennessee College of Medicine. Member of Memphis-Shelby County Medical Society.

new member

The *Journal* takes this opportunity to welcome these new members to the Tennessee Medical Association.

BLOUNT COUNTY MEDICAL SOCIETY Julie Ross Durand, M.D., Maryville

BRADLEY COUNTY MEDICAL SOCIETY *Roger Dale Miller, M.D.*, Cleveland

CONSOLIDATED MEDICAL ASSEMBLY OF WEST TENNESSEE

Susan Marie Francisco, M.D., Jackson Edward Everette Hockaday Jr. M.D., Jackson Scott Emerson Owens, M.D., Jackson

KNOXVILLE ACADEMY OF MEDICINE

Karsten Gammeltoft, M.D., Knoxville Mary M. Headrick, M.D., Oak Ridge Timothy J. Panella, M.D., Knoxville

LINCOLN COUNTY MEDICAL SOCIETY

William Kyle Spears, M.D., Fayetteville Robert A. Westover, M.D., Fayetteville

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Seborrheic Inclusion Cyst

EARL J. BROWN, M.D. and GEORGE A. YOUNGBERG, M.D.

Introduction

Epithelial cysts are common lesions of the skin, but they very rarely have seborrheic keratosis-like linings. Rahbari¹ reported five such cases, which he called epidermoid cysts with seborrheic verruca-like cyst walls. None of his reported cases had any similar changes in the overlying epidermis, nor did any of his cases have a history of seborrheic keratosis at the site of the cyst. We report a case of a similar lesion that developed following the surgical excision of a seborrheic keratosis.

Case Report

An 81-year-old white man had a darkly pigmented keratotic lesion under the left eye which had been present for about one year. The excised specimen measured $0.6 \times 0.5 \times 0.2$ cm and was diagnosed microscopically as a seborrheic keratosis. Twelve months later the patient had an erythematous raised nodule under the left eye at the site of the previous excision. The lesion was excised as a possible basal cell carcinoma. Sections revealed a cyst within the dermis having an acanthotic, papillomatous lining that was strongly reminiscent of a seborrheic keratosis (Fig. 1). The cyst lining was continuous with the overlying epidermis, and the lumen was filled with keratin.

Discussion

Several types of epithelial cysts occur in the skin. About 80%² are lined by stratified squamous epithelium that keratinizes like the epidermis and the infundibular portion of the hair follicle; they are known as epidermal or epidermoid cysts. The

majority of the remaining epithelial cysts keratinize like the isthmus of the hair follicle; these are referred to as pilar, trichilemmal, or isthmus-catagen cysts. There are several much less common types of epithelial cysts, but we are aware of only two pre-



Figure 1. The cyst lining is acanthotic, papillomatous, and strongly reminiscent of a seborrheic keratosis (hematoxylin-eosin, ×250).

From the Division of Pathology, Veterans Affairs Medical Center, and the Department of Pathology, James H. Quillen College of Medicine, East Tennessee State University, Johnson City.

Reprint requests to Department of Pathology, James H. Quillen College of Medicine, PO Box 19540A, Johnson City, TN 37614 (Dr. Brown)

SEBORRHEIC INCLUSION CYST/Brown

vious reports 1,3 of epidermoid cysts having a seborrheic keratosis-like lining.

Rahbari¹ reported five epidermoid cysts with seborrheic verruca-like cyst linings, and estimated their incidence to be about one case per 25,000 dermatopathologic specimens. Recently Chun and Im³ reported a sixth case having a similar histology. In none of these cases did the cyst communicate with overlying epidermis, which was normal to thinned. Our case did have a connection to overlying epidermis, which appeared normal. None of the previous six reported cases were associated with a prior removal of a seborrheic keratosis at the site of the cyst.

The pathogenesis of epidermal cysts is varied. They are commonly located on the face, trunk, neck, and extremities and are thought to be formed by obstructed or occluded follicles, such as the epidermoid cysts found in acne patients. Several studies^{4,5} have shown that proliferations of sweat ducts, hair follicles, or other adnexal epithelium can form cysts. Less often, epidermoid cysts can result from traumatic implantation of the overlying epidermis, which is considered by several authors^{6,7} to be the mechanism of the formation of epidermoid cysts in uncommon locations, such as the palms or the soles.

The etiology of epidermoid cysts with a seborrheic verruca-like lining is uncertain. Rahbari¹ suggested that a seborrheic verruca-like cyst might be an acanthotic and papillomatous outgrowth of the follicular infundibulum, possibly associated with aging, as most of his patients were in the fifth or later decades of life. The cyst reported by Chun and Im³ occurred on the buttocks of a young woman, and they suggested that the seborrheic verruca-like cyst lining might be a nevoid change or might be due to a mechanical factor. Our case occurred in an elderly man who had a previous excision at the site of the cyst; therefore we also suggest that there may be a mechanical factor in the development of these types of epithelial cysts.

Summary

Epidermoid cysts with seborrheic keratosis-like linings are a recently described rare variant of epidermoid cysts. We report a case in which such a cyst developed following the excision of a typical seborrheic keratosis.

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HELP FOR IMPAIRED PHYSICIANS

Through its Committee on Impaired Physicians, TMA helps doctors who are suffering from alcoholism and drug addiction. The thrust of the program is rehabilitative, not punitive. The Committee is composed of physicians who have special expertise in these areas, some from personal experience. Effective treatment for these illnesses is achieved most easily when the disease is detected early; family, friends, and associates are urged to avoid misguided sympathy which enables the condition to deteriorate.

HELP US TO HELP

Call the TMA Impaired Physician Program (615) 385-3319; outside Nashville call collect. Telephone message service available around the clock.

Diagnosis and Treatment of Esophageal Disorders in Primary Practice

THOMAS P. SHORT, M.D. and EAPEN THOMAS, M.D.

Introduction

Chest pain is a common symptom for which patients seek the help of primary care physicians. In some of these patients the cause may not be readily evident. Even cardiac catheterization may not reveal a firm diagnosis. Indeed, up to 30% of all patients undergoing cardiac catheterization each year will be found to have normal coronary arteries. Some of these patients will return complaining of recurrent angina-like pains, and may be further evaluated; an abnormality may be found in up to 30%.2 Furthermore, we recently found a high prevalence of reflux disease and esophageal motility disorders in patients with coronary artery disease.3 In these patients, a more detailed history may reveal unrecognized symptoms, such as dysphagia, regurgitation, and heartburn.

Symptoms

The chest pain produced by the various esophageal motility disorders can be very similar to that of classical angina. It may be relieved with sublingual nitroglycerin. The pain can be retrosternal, and may be precipitated by the ingestion of hot or cold fluids. It may last for several hours and may radiate to the back and shoulders.

The dysphagia is typically intermittent and may be an important differentiating feature, since such disorders as esophageal webs, peptic strictures, and carcinoma typically produce progressive dysphagia first to solids and then to liquids. The dysphagia of motility disorders may be present simultaneously to both solids and liquids.

Regurgitation is a more specific symptom. Patients with achalasia, where food may stay within the esophagus for hours, often present with delayed regurgitation of undigested food that awakens them at night.

Specific Disorders

In various series, the most common esophageal motility disorder discovered in patients with normal coronary arteries is the so-called nutcracker



Figure 1. Achalasia. The barium swallow shows a dilated esophagus with a typical bird's beak terminal configuration.

Reprint requests to Division of Gastroenterology, Veterans Affairs Medical Center (111D), Mountain Home, TN 37684 (Dr. Thomas).

From the Division of Gastroenterology, Department of Internal Medicine, James H. Quillen College of Medicine, East Tennessee State University, Johnson City.

ESOPHAGEAL DISORDERS/Short

esophagus.^{1,4} This disorder is typified by abnormally strong and prolonged contractions in the distal esophagus (of greater than 180 mm Hg). The peristaltic progression within the esophagus is maintained, but these contractions may last more than six seconds.

Diffuse esophageal spasm is found less frequently, and it is associated with simultaneous (or nonperistaltic) contractions that on manometric testing are seen in more than 10% of wet swallows. Other findings may include prolonged contractions that may also be of a high amplitude.

Achalasia is characterized by failure of the lower esophageal sphincter to relax to baseline. There may also be a decreased force of contraction within the body of the esophagus so that with time the esophagus becomes dilated and tortuous.

The hypertensive lower esophageal sphincter (greater than 45 mm Hg) displays just that, with normal esophageal peristalsis. Patients who display other unusual findings are grouped into the category termed nonspecific motility disorders. These may include weakened peristaltic waves, retrograde contractions, and other findings.

Evaluation

Some of the features detailed above, in order to have clinical significance, should be correlated with the appearance of the typical pain described by the patient. Thus, some of our diagnostic methods may show abnormalities that may fail to correlate with symptoms.

The various techniques available include barium swallow, the Bernstein test, esophagoscopy, manometry, radioisotope studies, and 24-hour recording of the intraesophageal pH; the last is mentioned here because gastroesophageal reflux can be the cause of noncardiac chest pain in up to 50% of patients and is known to induce spasm.⁵ A barium swallow may suggest certain such diagnoses as achalasia and diffuse esophageal spasm; in the former, the esophagus may be dilated with its terminal portion narrowing to form the typical beak-like configuration (Fig. 1). Carcinoma may have the same pattern, and these patients are usually referred for endoscopy. Although not diagnostic, a "corkscrew" pattern may suggest diffuse esophageal spasm (Fig. 2).

Manometry remains the standard for classifying motility disorders. Present-day equipment (nonperfused, solid-state catheters) allow this to be safe, nonpainful, and quickly performed.

Nuclear studies help to determine noninvasively



Figure 2. Diffuse esophageal spasm. The barium swallow shows the "corkscrew" pattern.

whether there is delayed esophageal transit time and whether there is improvement with treatment.^{6,7}

Two methods can correlate findings with symptoms. In the Bernstein test a small catheter placed in the mid-esophagus is connected through a Y-piece to two bags, one containing normal saline and the other 0.1N hydrochloric acid. Reproduction of the patient's typical pain during acid infusion is a reliable finding. Since it has been shown that the Bernstein test can induce myocardial ischemia, it should be done after coronary artery disease has been ruled out. A diary kept during 24-hour pH monitoring may allow correlation of the patient's chest pain with gastroesophageal reflux (where the intraesophageal pH decreases to less than 4).

The 24-hour motility recordings are a reality, but are not yet widely available.

Treatment Strategies

Once a disorder has been characterized, several treatment modalities are available.

In the nutcracker esophagus, medications such as calcium-channel blockers and nitrates (which relax smooth muscle) have been tried with mixed success.⁸

In achalasia, newer medications such as the calcium-channel blockers have been compared to the other established modalities that include balloon (or pneumatic) dilation and surgical myotomy.⁷ Although medications proved to have positive manometric effects, their long-term use has been disappointing. Young and other low-risk patients should be offered balloon dilation as a curative option since medications appear to offer only short-term benefits.

Diffuse esophageal spasm is not as easy to treat, but a trial of nitrates or calcium-channel blockers is worthwhile, since other modalities have not been uniformly successful.

If reflux is found, the conventional antireflux measures in addition to a trial of H2-blockers may be indicated.

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Bullet Embolus to the Ascending Aorta Following a Gunshot Wound to the Chest

W. GLENN BRADHAM, M.D.; JAMES V. LEWIS, M.D.; DAVID H. SEWELL, M.D.; and ALLAN GARRETT, M.D.

Introduction

Penetrating injuries of the chest from stab or gunshot wounds are relatively common occurrences for many trauma centers. Initial evaluation and care of these injuries entail management of the immediate tissue trauma that these wounds produce. In the case of gunshot wounds, the bullet can directly injure numerous thoracic structures; it can also cause injury by entering the arterial or venous circulation and embolizing more distant areas of the body. Bullet embolization is a known but uncommon complication of gunshot wounds, only 156 cases having been reported in the English language literature. This reports our experience with one such case.

Case Report

A 42-year-old man was transferred to the Holston Valley Hospital Trauma Center 15 hours after having sustained multiple 22-caliber gunshot wounds to the left arm, axilla, and upper lateral chest. Initial AP and lateral chest x-rays had disclosed two bullets lodged in the chest wall and one bullet overlying the silhouette of the heart, and a left hemothorax. Tube thoracostomy had been performed with initial drainage of 1,000 ml of blood, but no continuing drainage. An arch aortogram had revealed no evidence of injury to the subclavian or axillary arteries. The patient remained hemodynamically stable and was transferred to the trauma center for treatment of a possible cardiac injury.

Shortly after admission to our hospital the central venous pressure was 10 cm of water. A 2-D echocardiogram revealed no evidence of pericardial effusion and, surprisingly, did not demonstrate the bullet, but with cardiac fluoroscopy it was seen moving with the heart but not tumbling. Cardiac catheterization and angiography were interpreted as showing the bullet in the tissue between the base of the aortic root and the pulmonary outflow tract, just below the right coronary cusp with some indentation of that cusp but no impingement on the coronary arterial outflow (Fig. 1).

During this time and for the subsequent three days the patient remained stable, without evidence of hemodynamic compromise or cardiorespiratory instability. On the third postinjury day the patient was taken to surgery for exploration and removal of the bullet; at that time no wound to the heart or

pericardium was found. The patient was placed on cardiopulmonary bypass and cooled to 28°C (82.4°F). After cannulation and decompression of the heart the bullet could not be felt within any of the cardiac chambers. Intraoperative ultrasound showed the missile in the area of the aortic valve. The aorta was cross-clamped, and an aortotomy thrombus was removed from the base of the aorta, exposing the intact bullet in the sinus of the right coronary cusp. The bullet was removed, and the aortotomy was closed and bypass terminated. The remainder of the operation and the postoperative course were uneventful. When last seen, the patient had no obvious sequelae. The entrance of the bullet into the circulation was never found, although it was theorized that it had occurred by way of a wound in one of the pulmonary veins with subsequent passage through the heart to the proximal aorta.

Discussion

The treatment of missile wounds of the heart has been well defined.^{2,3} A separate problem involves the management of bullets and similar missiles that have been retained within the heart after wounding. There



Figure 1. One frame of cardiac angiogram demonstrating the bullet's position in the root of the aorta just below the right coronary cusp. There is no impingement on the coronary arterial outflow.

From the Department of Surgery, James H. Quillen College of Medicine, East Tennessee State University, Johnson City.

has been controversy about the need for operative removal of these objects.^{4,5} The case presented here deals with a different, although related, aspect of gunshot wounds involving the heart.

Despite the frequency of gunshot wounds in this country, emobilization of a bullet or other penetrating missiles is uncommon. Of 7,500 vascular trauma cases sustained during the Vietnam conflict only 22 cases of bullet emboli were reported by Rich et al.6

Depending upon the site of entrance into the circulation, the bullet can emobilize distally if it is within the arterial system, or more centrally if within the venous system. Retrograde movement can also occur in large

Missiles that emobilize after they have penetrated arteries tend to produce immediate symptoms because of the secondary loss of blood flow and the resulting ischemia. Bullets in the venous system may migrate to the right heart and the pulmonary arteries, producing variable sequelae such as arrhythmias or clot formation. Bullet emboli can be asymptomatic, and thus less straightforward.

The possibility that a penetrating missile may have entered the circulation should be a consideration in any patient in whom the missile has not exited the body. If

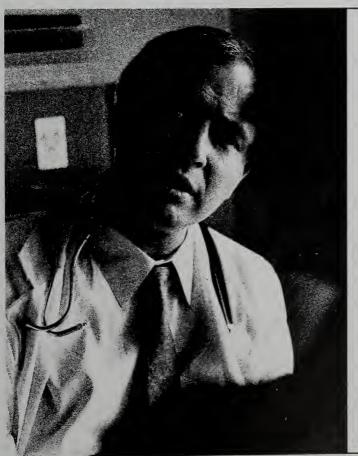
there is radiologic or physical evidence that the bullet has moved or if symptoms of ischemia develop, the diagnosis of bullet embolus should be uppermost in the trauma surgeon's mind. If, in an asymptomatic patient, the presence of a bullet within major arterial or venous circulation is confirmed or strongly suspected, expeditious removal should be considered. In our patient, the bullet could easily have moved into the cerebral vessels and produced an ischemic infarct of the brain. If there is risk of displacement, and removal of the bullet will not cause greater harm, it is advisable to do so.

In summary, bullet emboli are rare but can produce significant morbidity. If possible, missiles known or suspected to be within the vascular system should be removed before they move distally and produce symptoms.

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"We must make sure that policies are based on facts, not fears."

Dr. Paul Volberding, Researcher, University of California, San Francisco, Member, American Medical Association

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A Case of Abdominal Pain and Fever One Month After a Renal Artery Bypass Procedure

Case Report

A 65-year-old man with adult onset diabetes mellitus, severe hypertension, hyperlipidemia, nephrotic syndrome, and a history of peptic ulcer disease was found to have renovascular hypertension. Renal artery bypass surgery was performed, after which he did well except for some peripheral edema. One month after leaving the hospital, he felt vague lower abdominal pain radiating to his back and groin. He fell at home and had difficulty walking. He complained of having fever, chills, and night sweats.

On physical examination, his temperature was 101.4°F, blood pressure 140/88 mm Hg, and pulse 88/min. His abdomen was soft with active bowel sounds, but there was generalized abdominal tenderness. His incision site looked normal. There was peripheral edema, and strength in his lower extremities was decreased. The WBC count was 14,000/cu mm with a left shift.

CT scan of the abdomen revealed gas bubbles in the aortic wall and adjacent structures consistent with infectious aortitis. When Salmonella typhimurium grew in the blood cultures, ampicillin was administered intravenously, and surgical consultation was obtained. A right axillo-femoral bypass and femorofemoral bypass was performed, followed by resection and debridement of the infrarenal aorta. He received ampicillin for two weeks intravenously, and ciprofloxacin orally for another four months. He is currently doing well.

Discussion

Salmonella are gram-negative, non-spore-forming rods that most commonly cause gastroenteritis. Enteric fever due to Salmonella with bacteremia may be associated with seeding of the infection to any tissue in the body. On the other hand, a chronic carrier state may be present without symptoms.

Atherosclerosis and other processes that damage arterial endothelium predispose to salmonella endarteritis. Any major vessel can be involved. Salmonella bacteremia will result in endarteritis in 25% of patients older than 50 years.¹

The triad of back pain, fever, and pulsatile abdominal mass is present in up to 80% of patients with salmonella aortitis.² Diagnosis can be confirmed by blood cultures 50% of the time.³ CT scans of the abdomen, abdominal ultrasonography, and aortography are useful in the evaluation for salmonella aortitis. Early

diagnosis is crucial because of the high incidence of fatal rupture of the aorta if treatment is delayed.

Treatment consists of the intravenous administration of antibiotics to which *Salmonella* is sensitive. Ampicillin, ciprofloxacin, ceftriaxone, and chloramphenicol are the most effective antibiotics. Medical therapy alone cannot cure the infection. Debridement of the infected area is needed. Before debridement, a clean arterial bypass must be accomplished to preserve blood flow to the lower extremities. Currently, axillo-femoral bypass is in vogue to preserve lower extremity viability.⁴ Despite the improvements in diagnosis and treatment, mortality remains high.⁵

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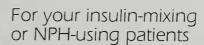
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president's page



HOWARD L. SALYER

Every Good and Perfect Gift

It's that time of year again. Just when you think things couldn't get any more hectic—along come the holidays! Shopping, parties, family get-togethers . . . the list just goes on and on.

Sometimes, we find ourselves getting so caught up in all of these activities that we forget that this is truly a blessed season in which we need to take stock of our lives and be thankful for the gifts and opportunities that have been given to us—and I am sure that you realize I am not referring to those gaily wrapped packages sitting under a beautifully decorated Christmas tree.

Quoting from the Epistle of James, "Every good and every perfect gift comes from above." As physicians, we have been exceptionally blessed, because we have been given a very special gift—a gift that appears in the form of talents and knowledge necessary to help mankind in a number of different ways. This gift also includes the privilege to treat individuals who are sick or who have been physically or emotionally injured, as well as the abilities to develop new procedures and research that will help others in the future.

But let us be ever mindful that although we might do the "hands-on" work, there truly is a higher power working on the behalf of both the patient and the physician. Whether we are in the operating room, in our offices, in the research laboratory or in the numerous other arenas in which we work, we are only instruments for the Lord—the recovery process is something only He can control, and His role cannot be underestimated.

Keeping all of those things in our hearts and mind, have a joyous holiday season.

Hal h Salyer 4.D.

A Christmas Legend

A Chinese photographer was riding one day through the snow covered countryside of interior China. His soul was troubled. He had been witnessing a great movement toward Christianity among his friends since the Japanese invasion. He longed to know the truth of what he had been hearing from Christian missionaries. As he rode along, he said "Lord, if I could only see Thy face, I would believe." Instantly a voice spoke to his heart, "Take a picture! Take a picture!" He looked out at the melting snow, forming pools of water and revealing here and there the black earth. It was an unattractive scene. Nevertheless, being thus strangely compelled, the man descended and focused his camera on the snowy roadside. Curious to know the outcome of the incident, he developed the film at once on returning to his home. Out from among the black and white areas of the snow scene a Face looked at him, full of tenderness and love—the face of Christ! He became a Christian as the result. And because the Chinese people think that God has in this wonderful way revealed Himself to them in the hour of their trial, many have since found the Saviour through the picture, as the story of it is told in various parts of China.

Perhaps some of you will take the time to study this Rorschach ink blot type of picture. In time you should be able to see very clearly the lovely face of Christ.



Editor's Note:

Back in 1968, when Edward T. Newell Jr., M.D. was president of the TMA, he used as his December President's Page "A Christmas Legend," which I am reprinting for you—again—as a Christmas gift. While it may be true that familiarity breeds contempt, I have always sort of doubted that it necessarily did, believing that if the subject were itself contemptible, then it deservedly would, and, on the other hand, that if it weren't, then it wouldn't, but would instead breed admiration, and even love. If that weren't so, then no marriage would stand a chance.

I obviously believe Ed Newell's contribution falls into that latter category, since I have already reprinted it once for our readers. That was almost 20 years ago, though, so that a lot of our younger readers will not be familiar with it, and I suspect others will have forgotten it. If you have seen it before, and it stirs contempt within your breast, well, feel free just to junk it.

This time around I have added something new. On previous runs I have gotten complaints that the face of Christ was not as obvious as the figure legend proclaimed it to be. I have, therefore, by removing the surrounding clutter, provided a key to the riddle. It is printed on page 602. But don't give up too soon. I think you will enjoy it more if you accept the challenge for at least a little while.—J.B.T.

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DECEMBER, 1991

editorials

Living Wills and Durable Power of Attorney

In June the TMA membership received a mailing from the Association in which there was a copy of the new Health Care Power of Attorney form updated to include changes enacted by the Tennessee General Assembly to bring it into conformity with the United States Supreme Court's *Cruzan* decision. In the letter that accompanied the new form you were promised a physician's office display that would detail that offering for your patients. That display is carried as an insert in this issue of the *Journal*. It is reproduced on heavy stock suitable for framing.

Your officers and Board of Trustees urge you to make these forms available to your patients and to encourage their use. The framed certificate in your office will remind them to ask you, and perhaps remind you to remind them that a copy of these documents, properly filled out, signed, witnessed, and notarized, should be a vital part of their medical record.

J.B.T.

Crossing the Delaware: A Christmas Note

No doubt the rules of construction count it unsuitable to start any piece with a digression; I'm sure my composition instructors would recoil in horror at the very notion. And so, before I go any further, I need to assure you that though this may seem to be a digression, it really isn't. It isn't because you and I will agree that it isn't. We will, won't we? Splendid!

Now that we have settled that, I want to let you in on something disquieting I have recently discovered about words. I wanted to use just the proper word—le mot juste, and no triflin' substitute—to describe such momentous political upheavals as have been going on in the world lately. The word that came immediately to mind was cataclysmic. Now I really do understand that I would be stretching a point to use cataclysm in such a context, since by definition the word means a natural disaster, such as an earthquake or flood. To use it to connote simply an earth-shaking event in which the earth didn't actually shake, though not really so very far off the definition, would likely be inappropriate. So it was back to the drawing board.

In casting about for that precise word, what I found was that there is a wealth of marvelous, resoundingly descriptive terms for disasters, but for happy, moving, significant events, they are, to say the least, both few and frumpy. Witness: milestone, event, landmark, occasion, turning point, episode, happening, incident—all sort of effete and unspectacular; nothing to match cataclysm, disaster, catastrophe, calamity, tragedy, fiasco, and so on.

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Now *there* are some *real* masterpieces. I apologize, then, for the colorless assortment that follows. It is the best I could do with what I was offered.

Few years in history have witnessed really monumental change, and I suspect there might not be universal agreement as to which years those were; much of the time it would depend upon the orientation of the individual making the assessment. What turns out to be one man's milestone might be another man's steppingstone. In addition, history often certifies an apparent puff-ball as having been a fullfledged turning point, such as, for example, the now notable birth that had such inauspicious beginnings in Judean Bethlehem around 2,000 years ago. Who would have thought that all of human history would be divided as to whether it followed or preceded that single—what—event? occurrence? happening? incident? A watershed on both sides, and that is, I guess, the best we can do.

It puts me in mind of what Walter Cronkite once said when he was asked why nobody ever reported anything but bad news. His answer was that it is because nobody cares to hear about the cats that came home.

A whole lot of the world's population would agree, I'm almost certain, that world events of this year of our Lord 1991 were earth-shaking. Though a few people apparently remain unconvinced, nearly everyone is persuaded, and nearly everyone else hopeful, that this has been the year that Communism died and the Cold War was finally laid to rest. History may or may not, of course, confirm that such an end was more than wishful thinking, but so it now appears to most observers, except for the most diehard witch-hunters. Anyway, even if the witch-hunters turn out to be right, 1991 will still have to be judged a turning point of one sort or another, whatever the outcome.

Of one thing I am certain, though: like everyone concerned with the birth in the stable so many years earlier, not even the participants in the rattle-trap, jury-rigged crossing of the Delaware River by a ragtag excuse for an army opposite Trenton, New Jersey on Christmas Eve, 1776, thought of it as earth-shaking. They were concentrating first on just staying alive on that freezing cold, sleet-infested night, and second, on doing their bit toward keeping the feeble flame of freedom from flickering out, as it seemed just then in danger of doing at any moment. History has decreed that sortie to be the turning point of the American Revolution, and as such, one of the real turning points of world history—in short, a momentous event of the first order. (Sorry. That was the best I could do.)

It all came of the way Christmas was being celebrated that night. In Trenton the Hessian mercenaries of the British were doing it according to tradition: they were deep in their cups on Christmas Eve, and trying to struggle out of them at daybreak on Christmas morning, when the entire British army was put to flight by the precipitate action of General Washington's bedraggled band of 2,400 half-frozen men, minus their reserves, who had been caught in the river's pack ice and arrived too late to join in the fun. They made up for it a few days later in Princeton, though, when the refurbished, renourished, and revived Continental Army finished off their opponent once and for all. There would be, of course, subsequent engagements, many of them brisk, and even significant, but according to most historians the outcome was never again in doubt, particularly considering that the British had too many more pressing problems elsewhere for them to bother with their upstart colonists so many miles away over an unfriendly ocean—particularly considering they were a surly bunch of heathen who didn't know how to keep Christmas.

Come to think of it, what went on at that first one wasn't much of a celebration, either. About all that went on was a great chorus of angels and a multitude of the heavenly hosts singing, "Glory to God in the highest, and on Earth, Peace, good will toward men" to some terrified shepherds camped out on a Judean hillside, while a young mother was having her baby in a cave amongst the animals because there was no room for her in the inn. Not much of a way to keep Christmas either, was it?

At the time, not much was expected to come of either incident, Christmas or no. Since something did, it's too bad there are no better words to describe them. Oh, well, the fruits of the one are not affected by man's ineptitude, and the other, we pray, will continue to survive it. I pray you will, too, with the great joy that shall be to all people.

J.B.T.

Remembering Pearl Harbor

There is something about a 50th anniversary that stirs a responsive chord in the human breast. Even a 50th birthday does, but that isn't quite what I had in mind; after all, every birthday calls for a celebration of sorts, and except for the honoree (or victim, as the case may be), who may have taken it as an occasion to feel his age, it's no big thing. Schools tend to make

much of their 50 year graduates, though, treating them from that day on as something special. A classmate remarked, cynically, I thought, but maybe just realistically, that our schools now look upon us as a ripe source of funds. Maybe so; certainly they sometimes behave that way—but that didn't start just then.

The 50th anniversary is termed *golden*, marking it as *the* special one. Centennials are, of course, even more special, but very few human beings ever see, let alone celebrate, the centennial of anything they were involved in except as latecomers. Fifty is a nice round number for a celebration, and so, the human species being wont to celebrate at the drop of a hat—or maybe better, of a bottle—one usually happens.

The radio in the living room of the Phi Chi House was tuned that fateful Sunday just 50 years ago, Sunday, Dec. 7, 1941, as it was nearly every Sunday, to the broadcast of the New York Philharmonic Symphony Orchestra concert, to which a number of us were paying rapt attention, when Beethoven (as I recall) was interrupted by a breathless announcement that Pearl Harbor was under attack by Japanese aircraft. "Shades of Orson Wells!" was our immediate reaction, remembering Wells' play-by-play account of the invasion of the Earth by Martians that had so terrified a whole generation a few years earlier. A real, sure-enough live attack on the United States by anybody was unthinkable. Where was our intelligence? (A good question, and one that has not even after 50 years received a completely satisfactory answer.) As to what was indeed happening, it soon became apparent that this was no game, that the United States was indeed at war, and that nothing would ever again be the same.

The "Day that Will Live in Infamy" is still stirring up controversy. Though there have been various explanations as to how the debacle could have happened, why it did happen, or why it was allowed to happen, the full story has never been, and likely never will be, revealed. It cost a lot of American lives, and between that day and V-J Day nearly four years later its consequences would cost a whole lot more—over 400,000 in all, with something over a million total casualties out of 16 million men under arms. And those are just American casualties.

A compendium of the most requested information from the New York Public Library does not list the casualty figures for our various wars, and in fact those wars are scarcely mentioned. Maybe nobody cares; or maybe it's just that nobody in New York cares. At least, the *World Almanac* knows we have been in some wars, and gives the figures. In all of our wars about 1.2 million Americans have died, with over twice that many total casualties. It occurred

to me that it would be appropriate to take note of both that and them on this 50th anniversary of the attack on Pearl Harbor. What else we should take note of is that not all of the casualties of war are under arms. For every one of those casualties there are loved ones with psychological scars, many of which took, or will take, a long, long time to heal; some never do. Furthermore, not all of those psychological scars were associated with a listed casualty. In wartime, particularly if the war is prolonged, those who bear no scars at all become very few and far between.

What all this should indicate to us is that keeping our freedom is a costly business. No matter how costly it is, though, it is not nearly so costly as regaining it once lost. We had better always keep that not in the back but in the front of our minds. The *Journal* therefore remembers and salutes those who gave their lives at Pearl Harbor on December 7, 1941, 50 years ago, and the loved ones they left behind. We cannot do that, though, without remembering and saluting their—our—comrades in arms who fell in all of our wars protecting what they loved the most—the ones they left behind.

J.B.T.



Ray Osler Fessey, age 85. Died October 8, 1991. Graduate of University of Tennessee College of Medicine. Member of Nashville Academy of Medicine.

Harold D. Freedman, age 77. Died October 8, 1991. Graduate of University of Tennessee College of Medicine. Member of Knoxville Academy of Medicine.

new member

The *Journal* takes this opportunity to welcome these new members to the Tennessee Medical Association.

KNOXVILLE ACADEMY OF MEDICINE Dean Montgomery Turner, M.D., Knoxville

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Margaret Elizabeth Tidd, M.D., Memphis

(Students)

James Noah Eikholz, Memphis Rhonda Sullivan, Memphis

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TMA Members Receive AMA Physician's Recognition Award

The following TMA members qualified for the AMA Physician's Recognition Award during September 1991. This list, supplied by the AMA, does not include members who reside in other states.

Physicians can receive the PRA certificate valid for one, two, or three years. For the one-year award, physicians report 50 hours of continuing medical education, including 20 hours of Category 1; for the two-year award, physicians report 100 hours of CME, including 40 hours of Category 1; for the three-year award, physicians report 150 hours of CME, 60 of which are Category 1.

Robert B. Bendt, M.D., Nashville Maury W. Bronstein, M.D., Memphis Bruce B. Brown, M.D., Union City James D. Bryant, M.D., Nashville Larry D. Burke, M.D., Memphis John W. Chambers, M.D., Cleveland Cornell C. Faquin, M.D., Memphis Nicholas Gotten Jr., M.D., Memphis James K. Hitchman, M.D., Nashville Frederick T. Horton, M.D., Nashville William A. James, M.D., Union City David V. MacNaughton, M.D., Chattanooga Ralph L. Mills, M.D., Johnson City Fernando T. Miranda, M.D., Madison Lawrence R. Nickell, M.D., Columbia Donald D. Owens, M.D., Memphis Edgar H. Pierce Jr., M.D., Nashville Robert M. Potter, M.D., Maryville Peter J. Quinn, M.D., Memphis Omer C. Renner Jr., M.D., Morristown E. Conrad Shackleford, M.D., Hendersonville

personal news

Thomas W. Conway, M.D., Newport, has been named a Fellow of the American Academy of Family Physicians.

John M. Hodges, M.D., Memphis, has received an Honor Award from the American Academy of Otolaryngology-Head and Neck Surgery, recognizing his assisting the Academy in teaching or research.

announcement.

CALENDAR OF MEETINGS

NATIONAL

Jan. 15-16	Contact Lens Association of Ophthal-
	mologists—Caesars Palace, Las Vegas
Jan. 16-18	American Academy of Pain Medicine—
	Registry Resort, Scottsdale, Ariz.
Jan. 19-25	Southern Clinical Neurological Society—
	Cheeca Lodge, Islamorada, Fla.
Jan. 29-31	Southern Society for Pediatric Research—
	New Orleans
Feb. 10-12	Aging: The Quality of Life (sponsored by
	Nat'l Inst of Health)—Washington, D.C.
Feb. 12-16	National Update on Allergy and Clinical Im-
	munology Conference—Keystone, Colo.
Feb. 17-19	Cardiopulmonary Rehabilitation Symposium:
	Status '92—Sheraton World Hotel, Orlando
Feb. 20-25	American Academy of Orthopaedic Sur-
	geons—Washington, D.C.
Feb. 29-March 1	Endoscopy Update 1992: The Southern
	California Society for Gastrointestinal Endos-
	copy Symposium—Century Plaza Hotel, Los
	Angeles

STATE

April 8-11 Tennessee Medical Association, 157th Annual Meeting—Opryland Hotel, Nashville

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A Christmas Legend . . .

(From page 598)





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This offer is not available in Delaware. The information about the cost of the card described above is accurate as of 9,90. This information may have changed after that date. To find out what may have changed, call 1-800-847-7376.

TMA

continuing medical education opportunities

The continuing medical education accreditation program of the TMA has full approval by the Accreditation Council for Continuing Medical Education. An accredited institution or organization may designate for Category 1 credit toward the AMA Physician's Recognition Award those CME activities that meet appropriate guidelines. If you wish information as to how your hospital may receive accreditation, write: Director of Continuing Medical Education, Tennessee Medical Association, PO Box 120909, Nashville, TN 37212-0909.

IMPORTANT NOTICE

Published in this section are many educational opportunities which come to our attention which might be of interest to our membership. As some of these are very long, full year schedules, and others are detailed descriptions of courses, in order to conserve space, most of them will be published in only one issue of the Journal.

April 3-4	Functional Endoscopic Sinus Surgery
ripin 5 .	Workshop 1992
April 3-4	Annual Barney Brooks Lecture and H. Wil-
	liam Scott Jr., Society
April 10-11	Identifying Substance Abuse Problems in
	Clinical Medicine
April 11	Retinal and Vitreal Disorders: New Informa-
	tion for the Nonspecialty Surgeon
April 24-26	Application of Molecular Biology to the
•	Practice of Clinical Pathology
May 1-2	Doppler Ultrasound in Obstetrics and
•	Gynecology
May 22-23	16th Annual Sonography Symposium
June 3-6	Family Medicine Review
June 5-0	running reconcerne recorder

For information contact Division of CME, Vanderbilt University School of Medicine, D-8211 MCN, Nashville, TN 37232, Tel. (615) 322-4030.

IN TENNESSEE

VANDERBILT UNIVERSITY MEDICAL CENTER

Clinical Training Program

The doctor and faculty plan an individualized program to meet the physician's practice needs. This may include contact with patients, participation in clinical rounds and diagnostic procedures, interaction with faculty and housestaff, access to the Medical Center Library and other learning resources, and other benefits of a preceptorship. AMA Category 1 or AAFP prescribed credit is possible. Physicians *must* be licensed and be in active practice with evidence of liability coverage.

Ongoing Rounds and Conferences

Arrangements can be made for licensed practicing physicians to attend for credit.

Special Conferences/Seminars

Detailed brochures for the following courses are available. In some cases, registration numbers are limited.

Jan. 24-25	Gynecologic Surgery Workshop in Pelviscopy, LEEP, and Laser
Feb. 1-7	Practical Aspects of Diagnostic Radiology/Medical Imaging V—Snowmass, Colo.
Feb. 6-8	Lasers in Otolaryngology—Head and Neck Surgery
Feb. 16-21	Magnetic Resonance Imaging Update 1992—Wailea, Maui, Hawaii
Feb. 18-22	3rd International Pain Symposium—Puerto Vallarta, Mexico
Feb. 19	Lung Disease in the Office Practice—Contemporary Problems in Pulmonary Medicine
Feb. 24-28	Infectious Disease in Ambulatory Care Medicine—Snowmass, Colo.
March 12-14	SEC Sports Medicine—Birmingham
March 15-20	The Spine: Current Concepts-Maui, Hawaii
March 27-28	Laryngeal Videoendostroboscopy: A Tutorial and Hands-On Workshop

MEHARRY MEDICAL COLLEGE

Extended Continuing Education Program

Arrangements have been made with many services and departments in the medical school to allow practicing physicians to participate in the service's activities for a period of one day to one week. This program provides an opportunity for physicians to study in depth for a specified period. The schedule of activities is individualized in response to the physician's request by the participating department. The experience includes conferences, ward rounds, audiovisual materials and contact with patients, residents and faculty.

Fee: \$75 per day or \$275 per five-day week of educational experience including lunch and parking at Meharry Medical College. Credit: AMA Category 1 of the Physician's Recognition Award, AAFP, and Continuing Education Units from Meharry Medical College. Application: For information contact Henry A. Moses, Ph.D., Director of Continuing Education, Meharry Medical College, 1005 D.B. Todd Blvd., Nashville, TN 37208, Tel. (615) 327-6235.

UNIVERSITY OF TENNESSEE

Continuing Education Schedule

Memphis

Feb. 15-22	Clinical Medicine—Kaui, Hawaii
Feb. 16-21	Update in Ob-Gyn—Grand Cayman, BWI
Feb. 29-March 1	Radiology
March 6-14	Obstetric and Gynecologic Issues for the
	1990s—Steamboat, Colo.
March 14-20	25th Annual Review Course for the Family
	Physician
March 25-28	Critical Care and Emergency Medicine—Hot
	Springs Ark

July 26-31 Contemporary Issues in Obstetrics and Gynecology—Destin, Fla. 24th Memphis Conference on the Mother, Sept. 24-25 Fetus, and Newborn Knoxville Critical Care Symposium—Asheville, N.C. March 26-29 April 9-11 15th Annual Family Practice Update & Review-Gatlinburg May 26-28 P.E.T.-Nuclear Medicine-Orlando, Fla. June 24-26 98th Annual Upper Cumberland Medical Society Meeting—Fall Creek Falls Resort, Pikeville, Tenn.

For information contact Mrs. Jean Taylor Bryan, Office of CME, University of Tennessee, 800 Madison Ave., Memphis, TN 38163, Tel. (901) 528-5547.

FAMILY PRACTITIONERS

Rural community health centers located in beautiful mountains of northeast Tennessee are accepting CVs from Family Practitioners for a staff physician position at the Bluff City Medical Clinic in Sullivan County. Guaranteed salary with excellent benefits including paid malpractice insurance, continuing education assistance, a retirement program, and moving expense allowance. Approved loan repayment site.

Contact Rosemary King, Rural Health Services Consortium, Route 8, Box 35, Rogersville, TN 37857. Phone (615) 272-9163. (EOE)

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Send CV or call:

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Phone: (803) 268-1687

EMERGENCY PHYSICIANS

MIDDLE TENNESSEE—immediate full-time and part-time positions available in small but growing community of Lewisburg, Tennessee, approximately 45 minutes to 1 hour south of Nashvile. State-of-the-art emergency department with excellent emergency-trained nurses (all critical care and ACLS certified) and good medical staff backup. We prefer primary care physicians with emergency department experience and/or Board eligible or certified status—must have ACLS certification. Low volume with excellent compensation and medical malpractice paid. Flexible hours, no overhead, excellent opportunity for quality physicians. Both short-term and long-term positions available NOW.

Contact:

Jerry Lee Surber, M.D.
Best Care Medical Group, Inc.
P.O. Box 1215
Lewisburg, TN 37091
Phone (615) 359-6241, ext 332, 333
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Established office available In Knoxville, Tennessee

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For information call Roger Walker at (901) 286-0925.

EMERGENCY PHYSICIANS Arkansas/Tennessee

Great opportunities in Northeast Arkansas and Middle Tennessee for primary care physicians with Emergency Department experience and ACLS. Moderate volume facility with excellent remuneration. Professional liability insurance can be procured on your behalf.

Contact Wayne Allen with Coastal Emergency Services of Memphis at (800) 777-1301 or in Memphis at (901) 767-1301.

PHYSICIANS WANTED

Full-time and part-time opportunities available for physicians in outpatient clinic. Must have adequate credentials and/or experience to treat both adults and children. Flexible schedules and paid malpractice insurance available.

Send CV and indicate interest in full-time or part-time position to:

P.O. Box 681479 Franklin, TN 37068

TMA placement rervice

The TMA Placement Service is a public service designed to assist physicians seeking practice opportunities in Tennessee and communities seeking new physicians (feefor-service agency inquiries not accepted). For information contact the Placement Service Office. PO Box 120909. Nashville, TN 37212-0909—(615) 385-2100.

LOCATIONS WANTED

FAMILY PRACTITIONER/EMERGENCY PHYSICIAN—age 39, graduate of Meharry Medical College in 1976—seeks a practice in the Nashville area. Board eligible. Available now. LW-2159

PSYCHIATRIST—age 50, graduate of SUNY Health Science Center at Brooklyn College of Medicine in 1968—seeks a solo or group practice in a rural location in East Tennessee. Board eligible. Available now.

LW-2160

FAMILY PRACTITIONER—age 27, graduate of Medical College of Georgia in 1989—seeks a solo, group, or institutional staff practice in a rural location in Tennessee. Board eligible in June 1992. Available July 1992. LW-2161

EMERGENCY PHYSICIAN/GENERAL PRACTITIONER—age 43, graduate of University of Alabama School of Medicine in 1973—seeks a practice opportunity in Middle Tennessee. Board certified. Available now.

INTERNIST/PEDIATRICIAN—age 30, graduate of University of Tennessee College of Medicine in 1988—seeks a group or institutional staff practice in a suburban location in East or Middle Tennessee. Board eligible. Available July 1992. LW-2163

FAMILY PRACTITIONER—age 28, graduate of University of Tennessee College of Medicine in 1985—seeks a group practice in a suburban location in East Tennessee. Board eligible in 1992. Available August 1992. LW-2164

INTERNIST—age 28, graduate of University of Tennessee College of Medicine in 1989—seeks a solo or group practice in Middle Tennessee. Available in the fall of 1993.

LW-2165

GENERAL SURGEON—age 32, graduate of University of Louisville School of Medicine in 1983—seeks a group practice in East Tennessee. Board eligible. Available in July 1992. LW-2166

PEDIATRICIAN—age 32, graduate of Eastern Virginia Medical School in 1989—seeks a group or academic practice in a suburban or large city location in East Tennessee. Available 1993. LW-2167

FAMILY PRACTITIONER/EMERGENCY PHYSICIAN—age 44, graduate of Medical College of Pennsylvania in 1982—seeks a group or institutional staff practice in a suburban or large city location in Middle Tennessee. Board certified. Available now. LW-2168

FAMILY PRACTITIONER/EMERGENCY PHYSICIAN—age 28, graduate of University of South Carolina Medical School in 1989—seeks a group practice in a suburban location in East Tennessee. Board eligible. Available August 1992. LW-2169

PHYSICIANS WANTED

CARDIOLOGIST and FAMILY PRACTITIONER—needed in Bristol in East Tennessee to join a group practice leading to a partnership. Must be board eligible. Needed now. PW-1090

GENERAL PRACTITIONER or **FAMILY PRACTITIONER**—needed in Bolivar in West Tennessee to join a group practice. Needed now. PW-1091

PRIMARY CARE PHYSICIAN—needed in several counties in Middle Tennessee. Must be board eligible for this health officer position. Needed now. PW-1092

FAMILY PRACTITIONER or **INTERNIST**—needed in Nashville to join a group practice with a community health center serving minority population. Board certified preferred. Needed now. PW-1094

PEDIATRICIAN—needed in Paris in West Tennessee to join a solo practice. Must be either board certified or board eligible. Needed now. PW-1095

INTERNIST, FAMILY PRACTITIONER and OB-GYN—needed in Memphis to join a group practice. Board certified preferred. Needed now. PW-1097

INVASIVE CARDIOLOGIST—needed in Memphis to join a solo practice with another physician currently looking for a partnership. Must be board certified in internal medicine and board eligible in cardiology. Needed now.

PW-1098

GERIATRIC PHYSICIAN—needed in Murfreesboro in Middle Tennessee to join a practice as medical director. Needed now. PW-1099

INTERNIST, FAMILY PRACTITIONER and PEDIATRICIAN—needed in Nashville to join a group practice. Must be either board certified or board eligible. Needed now. PW-1100

GENERAL PRACTITIONER or FAMILY PRACTITIONER—needed in Chattanooga to join a solo practice for a physician retiring at the end of the year. Needed now.

PW-1101

1991 MEMBERSHIP ROSTER TENNESSEE MEDICAL ASSOCIATION

An alphabetical listing of the members of the Tennessee Medical Association by component medical society is published as a service to the membership. An asterisk (*) denotes physicians exempt from dues. A dash (-) denotes a student member

BEDFORD COUNTY MEDICAL SOCIETY

BEDFORD COUNTY MEDICAL SOCIETY

Barnes, Donald D, Shelbyville
Beavers, Lana Sharon, Shelbyville
Brite, Chas Richard, Murfreesboro
*Cooper, Albert Lee, Shelbyville
Derryberry, John S, Shelbyville
Gipson, Bruce Martin, Shelbyville
Jayakody, Frank Lorenz, Shelbyville
Johnson, Sue Paine Welch, Shelbyville
Magnuson, Carol Lent, Shelbyville
Melson, Danny Lee, Shelbyville
*Moulder, Grace E, Shelbyville
Ownby, Fred Dillard, Bell Buckle
Rich, Earl Freeman, Shelbyville
Richards, Aubrey Thos, Shelbyville
*Rogers, Benj Carl, Shelbyville
Sells Jr, Samuel P, Shelbyville
Standard, Pamela G, Antioch
Stimpson, Charles L, Shelbyville
*Womack, Sara, Shelbyville

BENTON-HUMPHREYS COUNTY MEDICAL SOCIETY

Ali, Maysoon Shocair, Waverly
Ali, Subhi Dawud Suboh, Waverly
Anderson, Mark Warren, Waverly
Blackburn, Wm H, Camden
Bourne Jr, Robert I, Camden
Butterworth, Joe S, Camden
Curtis, T Randall, Waverly
Dominguez, Noel R, Waverly
Hartley, Mark F, Waverly
*Horton, Robt Leslie, Camden
McClure, Wallace Joe, Waverly
Skelton, M Angela, Camden
Stephens, Joseph W, Waverly
Vitualla, Agustin V, Camden
Walker, Arthur Winfrey, Waverly

BLOUNT COUNTY MEDICAL SOCIETY

*Agee, Oliver King, Maryville
Beard, Marvin Robison, Maryville
Bell, W Ken, Maryville
Booher, Robert W, Maryville
Booher, Robert W, Maryville
Bowen, John H, Maryville
Brown, Edward Francis, Maryville
Burkhart, Patrick H, Maryville
Burkhart, Patrick H, Maryville
Callaway, James Miller, Maryville
Callaway, James Miller, Maryville
Calvert, David, Maryville
Calvert, David, Maryville
Colman, Cheryl E, Maryville
Coleman, Cheryl E, Maryville
Cowan, John David, Maryville
Cowan, John David, Maryville
Crowder, Clay G, Maryville
Crowder, Clay G, Maryville
Ellington, Eric Patrick, Maryville
Elliott, Wm Earl, Maryville
Elliott, Wm Earl, Maryville
Elliott, Wm Earl, Maryville
Ellis, E Stephen, Alcoa
Elmore, Dale B, Maryville
Finney Jr, Raymond A, Maryville
Flickinger, Ted Lawrence, Maryville
Flickinger, Ted Lawrence, Maryville
Gallagher, Michael P, Alcoa
Gibson, Ernest Russell, Maryville
Green, Mark E, Alcoa
Hammett Jr, Jay, Maryville
Haralson III, Robt Hatton, Maryville
Haralson Jr, Robt H, Maryville
Hatfield, Chas Newman, Maryville
Hatfield, Chas Newman, Maryville
Haenny, Jerome James, Maryville
Heiny, Jerome James, Maryville
Heiny, Jerome James, Maryville
Henry, James Spencer, Alcoa
Hoffmann, Paul Wilfried, Maryville
Holder, James Thos, Maryville
Holmes, Gregory M, Maryville
Holmes, Gregory M, Maryville
Holmer, Gregory M, Maryville
Ingram III, John Jackson, Maryville
Ingram III, John Jackson, Maryville
*Stebell Jr, Homer L, Maryville
*Kintner, Elgin P, Maryville
*Kintner, Elgin P, Maryville
*Lapenas, Don J, Maryville
*Lapenas, Don J, Maryville
*Lapenas, Don J, Maryville
*Lauphmiller, Roy W, Maryville
*Lapenas, Cot J, Maryville
*Lauphmiller, Roy W, Maryville
*Lauphmiller, Roy W, Maryville
*Lauphmiller, Roy W, Maryville
*Lapenas, Don J, Maryville

A dash (—) denotes a student member.

Mandrell, Joe Thos, Alcoa
Marmon, Kenneth Waldo, Maryville
McAmis, John Carl, Maryville
McCroskey, David L, Maryville
McCroskey, Marye Lois, Maryville
McCroskey, Marye Lois, Maryville
Metelka, Richard C, Maryville
Millard, James Henry, Maryville
Morgan, Patrick Lee, Maryville
Newman, David Grant, Maryville
Peterson, Marvin Dean, Maryville
Peterson, Marvin Dean, Maryville
Petety, Cathy Ellen, Maryville
Pittenger, John, Maryville
Pittenger, John, Maryville
Potter, Robert M, Maryville
Potfitt, James Nicholas, Maryville
Radoff, Fredric M, Alcoa
Raper, Chas Allen, Maryville
Ray, Jonathan H, Maryville
Ray, Jonathan H, Maryville
Simpson Jr, Oscar L, Maryville
Simpson Jr, Oscar L, Maryville
Simpson Jr, Dscar L, Maryville
Smalley Jr, J Bryan, Maryville
Smuckler, Alan Lee, Alcoa
Sommerville Jr, Lewis C, Maryville
Thompson, Bryan Brooks, Maryville
Thurston, Timothy Wm, Alcoa
Tolhurst, George F, Maryville
Trekell, Melissa E, Maryville
Vandergriff, Harris T, Maryville
Weatherbee, Taylor Carson, Maryville
Webb, John V, Maryville
*Yarborough, John A, Maryville

BRADLEY COUNTY MEDICAL SOCIETY

*Yarborough, John A, Maryville

**BRADLEY COUNTY MEDICAL SOCIETY*

*Aldrich, Wm T, Cleveland
Anderson, David, Cleveland
Appling, John Morgan, Cleveland
Appling, John Morgan, Cleveland
*Batchelor, Marvin R, Cleveland
Beasley, Robert Alan, Cleveland
Besing, John Wm, Cleveland
Besing, Thomas Harold, McDonald
Blank, Nancy, Cleveland
Bowers, William D, Cleveland
Brewer, Randall J, Cleveland
Bryan, John Milton, Cleveland
Bryan, John Milton, Cleveland
Byers, Glen Marsh, Cleveland
Byers, Glen Marsh, Cleveland
Catanese, Marlene Ann, Benton
Chaffin, David C, Cleveland
Chambers, John Wallace, Cleveland
Chambers, John Wallace, Cleveland
Chastain Jr, Chalmer, Cleveland
Chastain, Allan Chalmer, Cleveland
Chastain, Allan Chalmer, Cleveland
Chastain, Kent, Cleveland
Chastain, Kent, Cleveland
Coleman, Ronald S, Cleveland
Collins, Larry C, Cleveland
Collins, Larry C, Cleveland
Collins, Larry C, Cleveland
Collins, Larry C, Cleveland
Collemer, Michael Alan, Cleveland
DeVane, Jerry, Cleveland
DeVane, Joerry, Cleveland
DeVane, Joerry, Cleveland
DeVane, Joerry, Cleveland
DeVane, Joerry, Cleveland
Hovand, Johnson, Donald Baker, Cleveland
Hamilton, Howard Ken, Cleveland
Harting, Don C, Cleveland
Harting, Don C, Cleveland
Harting, Don C, Cleveland
Harting, Condon R, Copperhill
Hendrick, John P, Cleveland
Harting, Con, Cleveland
Hays, William A, Cleveland
Hughes, Chas Richard, Cleveland
Hughes, Chas Richard, Cleveland
Johnson, Daniel W, Cleveland
Johnson, Daniel V, Cleveland
*Johnson, Daniel V, Cleveland
*Johnson, Frank Kelley, Cleveland
*Johnson, Jr, Frank Kelley, Cle

Mazzolini, J Michael, Cleveland
McIntyre, Stephen R, Benton
McNulty, John Stephen, Cleveland
Miller, Roger Dale, Cleveland
Mitchell, Hays, McDonald
Monnig, Jack Anthony, Cleveland
Murphy, Bill H, Cleveland
Murphy, John Allen, Cleveland
Muths, Frederick A, Cleveland
Newton, Nicholas, Cleveland
Newton, Nicholas, Cleveland
Powell, John Manley, Cleveland
Powell, John Manley, Cleveland
Proffitt, Wm I, Cleveland
Rogness, John A, Cleveland
Scruggs, Fenton Lee, Cleveland
Scruggs, Fenton Lee, Cleveland
Scruggs, Fenton Lee, Cleveland
Stanbery II, William Cecil, Cleveland
Stanbery II, William Cecil, Cleveland
Stone, James Patterson, Cleveland
Stone, James Patterson, Cleveland
Taylor, Owen C, Cleveland
Thurman, James Robt, Cleveland
Thurman, James Robt, Cleveland
Tilson, Forrest Blain, Cleveland
Viser, Timothy Allen, Cleveland
Younger, Clyde P, Cleveland

BUFFALO RIVER VALLEY MEDICAL SOCIETY

Alderson, Chas Malcolm, Parsons Alderson, Chas Malcolm, Parsons Anand, Veena, Hohenwald Anand, Virender, Hohenwald Averett, Stephen L, Linden Barden, Leroy F, Linden *Coleman, Robt M, Murfreesboro *Cook, William N, Primm Springs *Elrod, Parker David, Centerville *Holladay, Bertie L, Centerville McGinley, James Henry, Franklin

CAMPBELL COUNTY MEDICAL SOCIETY

CAMPBELL COUNTY MEDICAL SOCIETY

Burrell, John S, Lake City
Cline Jr, Elijah Grady, LaFollette
Cohen, Thos Leonard, LaFollette
Crutchfield, James Donald, LaFollette
Day, George Louis, Harrogate
Farris, James Clarence, LaFollette
Giles, James W, LaFollette
Hall III, Ronald Daker, LaFollette
Hartman, Ronald D, Jellico
Hwang, Li-Min, LaFollette
Isham, Charles Aubrey, LaFollette
Jones, John R, Corbin, KY
McRay, David E, Jellico
*Prater, Chas Alvin, Jellico
Schleifer, Kieth R, Jellico
*Seargeant Jr, Lee Jess, LaFollette
Shih, Yiu-Fel, LaFollette
Stafford, William Lewis, Jellico
Stanley, John Matthew, Jellico
Vongkasemsiri, Sunan, Tazewell
*Walker, Jesse Lee, Jellico
Wilkens, Chas Henry, Jellico
Willis, Randall M, Cumberland Gap
Wood, Burgin Henry, LaFollette

CARTER COUNTY MEDICAL SOCIETY

*Bronson, S Martin, Elizabethton
Burik, Nicholas P, Elizabethton
Chambers, Gary R, Elizabethton
Craig, James P, Elizabethton
Crowder, Brenda Jane, Elizabethton
Freeman, John L, Elizabethton
Gallaher, Richard Grant, Elizabethton
Galloway, Richard Eugene, Elizabethton
Gastineau, Jerry Lee, Elizabethton
Hopland, Arnold O, Elizabethton
Laing, Brent D, Elizabethton
Martin Jr, Ricardo S, Elizabethton
May, Andrew Stephen, Elizabethton
May, W Joyce, Elizabethton
*Pearson, Elmer Tyler, Elizabethton
*Pearson, Elmer Tyler, Elizabethton
Recce, Richard R, Johnson City
*Slagle, David J, Elizabethton
Taylor, Tedford Steve, Elizabethton
Walter, Robert E, Elizabethton
Walter, Robert E, Elizabethton
Wells, Charles J, Elizabethton

CHATTANOOGA-HAMILTON COUNTY MEDICAL SOCIETY

Abell, James E, Hixson
Abramson, Jerome H, Chattanooga
Ackell, Adele B, Chattanooga
Ackell, Adele B, Chattanooga
Adams Jr, John W, Chattanooga
Adams, Carol J, Chattanooga
Adams, Charles C, Chattanooga
Adams, Charles C, Chattanooga
Adken, Michael M, Chattanooga
Akin, Edgar Danl, Chattanooga
Akin, Edgar Danl, Chattanooga
Allen, Billy Jason, Ooltewah
Allen, George E, Chattanooga
Allen, Elily Jason, Ooltewah
Allen, George E, Chattanooga
Allare, Chast H, Chattanooga
Allare, Chast H, Chattanooga
Amarani, Jacob, Chattanooga
Anderson, Harry S, Chattanooga
Anderson, Harry S, Chattanooga
Anderson, Hillip, Chattanooga
Anderson, Fillip, Chattanooga
Anderson, Steven R, Signal Mountain
Apyan, Paul M, Hixson
Armstrong, Richard P, Chattanooga
Arnold, Coleman Lee, Chattanooga
Arnold, Tra L, Chattanooga
Avery, Joel Eugene, Chattanooga
Bacon, Stuart Peter, Dayton
Baker, David, Chattanooga
Bacon, Stuart Peter, Dayton
Baker, David, Chattanooga
Banks Jr, Woodruff A, Chattanooga
Barnett III, Robert M, Chattanooga
Barnett, Frances H, Jasper
Barnet, Frances H, Chattanooga
Bearnet, Frances H, Chattanooga
Bearnet, Frances H, Chattanooga
Berglund, Robert K, Chattanooga
Berglund, Robert K, Chattanooga
Berglund, Robert K, Chattanooga
Beehn, Walter Edward, Chattanooga
Beehn, Walter Edward, Chattanooga
Beehn, Frank E, Chattanooga
Beehn, Walter Edward, Chattanooga
Beehn, Walter Edward, Chattanooga
Beehn, Walter Edward, Chattanooga
Boehn, Frank E, Chattanooga
Boehn, Walter Edward, Chattanooga
Booder, Anita Madria, Hixson
Boiser, Anita Madria, Hixson
Boiser, Anita Madria, Hixson
Boser, Try Isolis L, Chattanooga
Chamberlain II, Morrow, Chattanooga
Chamberlain L, Chatt

Cherry, Collin G, Chattanooga
Clark, Murrell O, Chattanooga
Cleaveland, Clifton Rance, Chattanooga
Clements, Joel Benj, Chattanooga
Coddington, Robt Chas, Chattanooga
Cohen, Jonathan Stuart, Chattanooga
Collins, David Newton, Chattanooga
Conn, Eric Hadley, Chattanooga
Cook, Thomas Andrew, Chattanooga
Cooper, Floyd C, Chattanooga
Corey Jr, James Hicks, Chattanooga
Cox, John Michael, Chattanooga
Cox, Sue Clarke, Chattanooga
Craft, Phil Douglas, Chattanooga
Crawley Jr, James F, Chattanooga
Crawley Jr, James F, Chattanooga
Crawley Jr, William D, Ft Oglethorpe, GA
Creecl Jr, James Heaton, Chattanooga
*Crowell, John M, Chattanooga
*Crowell, John M, Chattanooga
*Currey, Joe T, Chattanooga
*Currey, Thos Woodruff, Chattanooga
Curtis, Thos H, Ft Oglethorpe, GA
Daghlian, Bedros D, Chattanooga
Daniell, Malcolm Butler, Chattanooga
Davidson, Deanna Starr, Chattanooga
Davidson, Deanna Starr, Chattanooga
Davis Jr, James Phillip, Chattanooga
Davis Jr, James Wilson, Signal Mountain
Davis, Jimmy B, Chattanooga Davis Jr, James Phillip, Chattanooga
Pavis, James Wilson, Signal Mountain
Davis, Jimmy B, Chattanooga
DeRuiter, Peter Louis, Chattanooga
DeRuiter, Peter Louis, Chattanooga
Dickinson, Elizabeth B, Chattanooga
Dickinson, Elizabeth B, Chattanooga
Doddson, David Bryan, Chattanooga
Dodason, Naridard B, Chattanooga
Donaldson, Richard B, Chattanooga
Donaldson, Richard B, Chattanooga
Dowells, Michael, Chattanooga
Dowell, Wm Curtis, Hixson
Dowlen, Steven H, Chattanooga
Drake, James Robt, Chattanooga
Drake, Robert A, Chattanooga
Dressler, Stanley Jay, Chattanooga
Dressler, Stanley Jay, Chattanooga
Duckert, David H, Chattanooga
Duckert, David H, Chattanooga
Duckert, William D, Chattanooga
Duchan, Victor A, Chattanooga
Duran, Philip Jerald, Chattanooga
Duran, Philip Jerald, Chattanooga
Duryer, Wm Knowles, Hixson
Dyer Jr, Wm Carl, Chattanooga
Ellis, Fric R, Chattanooga
Ellis, Fric R, Chattanooga
Ellis, John Clyde, Chattanooga
Ellis, Suresh, Chattanooga
Ellod, Bruce A, Ft Oglethorpe, GA
Enjeti, Suresh, Chattanooga
Epley, John M, Chattanooga
Epley, John M, Chattanooga
Epley, John M, Chattanooga
Eplery, John Thos, Chattanooga
Fain III, Guy F, Chattanooga
Fain III, Guy F, Chattanooga
Fainber, Sharon Nancy, Chattanooga
Feinberg, Edward B, Chattanooga
Feinberg, Fedward B, Chattanooga
Feinberg, Fedward B, Chattanooga
Fernewald, Clarence L, Hixson
Ferguson, Kevin R, Chattanooga
Fernandez-Cruz, Paz A, Chattanooga
Ferney, James Mitchell, Chattanooga
Ferney, Fullip Wesley, Signal Mountain
Frowler, Wm Robt, Chattanooga
Ferney, H, Sharon
Ferguson, Kevin R, Chattanooga
Ferney, James Mitchell, Chattanooga
Franklin, John David, Chattanooga
Gefter, Jeffrey W, Chattanooga
Gefter, Monica Aviva Leher, Hixson
Ginsberg, Joel Fine, Chattanooga
Gefter, Monica Aviva Leher, Hixson
Ginsb

Harnsberger, Benj Danl, Chattanooga
Harvey, Hathaway K, Chattanooga
Haskins, Drewry Edgar, Ringgold, GA
Haskins, Joseph M, Chattanooga
Havron, James Blackman, South Pittsburg
Hawkins, Chas W, Chattanooga
Hawkins, Jenery, Chattanooga
Hawkins, Jenery, Chattanooga
Hawkins, Jenery, Chattanooga
Hayks JC, Cauley Wilmurtanooga
Hayes, Thomas E, Ft Oglethorpe, GA
Hayman Jr, Kenneth H, Ft Oglethorpe, GA
Hayman Jr, Kenneth H, Ft Oglethorpe, GA
Headrick, James R, Chattanooga
Hellmann Sr, Robert S, Chattanooga
Hellmann Sr, Robert S, Chattanooga
Henriksen, Jens David, Collegedale
Hennry, Warren B, Chattanooga
Herrick, C Neil, Chattanooga
Herrick, C Neil, Chattanooga
Hertzog, Michael Scott, Chattanooga
Hertzog, Michael Scott, Chattanooga
Hicks, Biram C, Chattanooga
Hicks, Biram C, Chattanooga
Hicks, Biram C, Chattanooga
Hoback Jr, James William, Chattanooga
Hoback Jr, James William, Chattanooga
Hoback Jr, James William, Chattanooga
Hong, Moom Wha, Chattanooga
Hopper, Richard E, Chattanooga
Hoyler, Richard E, Chattanooga
Hoyler, John R, Chattanooga
Hoyler, James
Hopper, Richard E, Chattanooga
Huth, Moel Clarence, Chattanooga
Huth, Moel Clarence, Chattanooga
Huth, Moel Clarence, Chattanooga
Huthes, Charles P, Chattanooga
Hughes, Charles P, Chattanooga
Hughes, Charles P, Chattanooga
James, Dabney, Chattanooga
Jennings III, R Hunter, Ft Oglethorpe, GA
Johnson, Jr, J Paul, Chattanooga
Johnson, Edward Downey, Sale Creek
Johnston, John T, Chattanooga
Jones, Rost Lloyd, Collegedale
Jeong, Yune-Gill, Chattanooga
Jones, Rost Lloyd, Collegedale
Jeong, Yune-Gill, Chattanooga
Jones, Roger C, Chattanooga
Jones, Roger C, Chattanooga
Jones, Roger C, Chattanooga
Jones, Roger C, Chattanooga
Kentey, John H, Chattanooga
Kentey, John H, Chattanooga
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Marsh, Clarence Bruce, Chattanooga
*Marsh, Wim Hollister, Chattanooga
Marshall, Robert N. Chattanooga
Mashchak, C. Ann, Chattanooga
Mashchak, C. Ann, Chattanooga
Mashchak, C. Ann, Chattanooga
McScales
McCallie, David P. Chattanooga
McCallie, David P. Chattanooga
McCallie, Jack B. Chattanooga
McCallie, Jack B. Chattanooga
McCaney, John Wells, Chattanooga
McGaulgy Jr, John R. Chattanooga
McGaulgy Jr, John R. Chattanooga
McGuire, Susan Kay, Chattanooga
McKoy, Robert C. Chattanooga
McKoy, Hobert C. Chattanooga
McKoy, Hobert C. Chattanooga
McMcMillan, James Gordon, Jasper
*McNeill, Thomas Pinckney, Chattanooga
Meadows III, William E. Chattanooga
Medison, Donald P, Chattanooga
Megison, Donald P, Chattanooga
Meyer, Carole M. Chattanooga
Meyer, Carole M. Chattanooga
Meyer, Melissa Lewis, Chattanooga
Meyer, Melissa Lewis, Chattanooga
Michelson, Marie Louise, Bowling Green, KY
Miller, Frank J, Chattanooga
Miller, Robt T, Chattanooga
Mills, Don Gilbert, Chattanooga
Mills, Gary E, Mixson
Miller, Robt T, Chattanooga
Mills, Jary E, Wixson
Mills, Jary E, Wixson
Mitchell Jr, Jerry Wayne, Chattanooga
Mills, Ron Gilbert, Chattanooga
Mills, Ron Richard Clarke, Chattanooga
Morrison, Richard Clarke, Chattanooga
Norton, Barry Parker, Chattanooga
Norton, Barry Raker, Chattanooga
Norton, B

Rogers, Marilyn J, Chattanooga
Rogers, Marilyn J, Chattanooga
Rohrer, Jane L, Chattanooga
Rose, Walter B, Chattanooga
Rowe, Wm Edward, Chattanooga
Royal, James Richard, Chattanooga
Royal, James Richard, Chattanooga
Russell, Wm Lee, Chattanooga
Sargent, Larry A, Chattanooga
Sargent, Larry A, Chattanooga
Sacusseman, Stephen P, Chattanooga
Scanland, Jeanne A, Chattanooga
Scanland, Jeanne A, Chattanooga
Scheinberg, Marty, Chattanooga
Scheinberg, Marty, Chattanooga
Schits, G Michael, Chattanooga
Scott Jr, Edgar Leonard, Chattanooga
Scott, Wayne, Chattanooga
Scal, Molly Elaine Roger, Chattanooga
Schele, Robert L, Chattanooga
Schele, Robert L, Chattanooga
Sheldon, John P, Signal Mountain
*Shelton, Geo Washington, Chattanooga
Sherrill, Janes Wm, Chattanooga
Sherrill, Leroy, Chattanooga
Sherrill, Leroy, Chattanooga
Sherrill, Fawin H, Chattanooga
Sherrill, Leroy, Chattanooga
Shuck JT, Edwin H, Chattanooga
Shuck JT, Fawin H, Chattanooga
Silvils, Geo Lefe Chattanooga
Smith, Silvils, Geo Lefe Chattanooga
Smith, Silvils, Geo Lefe Chattanooga
Smith, Bill M, Chattanooga
Smith, Bill M, Chattanooga
Smith, Stewart Phillip, Chattanooga
Smith, Stewart Phillip, Chattanooga
Snith, Stewart Phillip, Chattanooga
Solomon, A Lee, Chattanooga
Solomon, A Lee, Chattanooga
Stanko, Jr, Faul Edgar, Chattanooga
Stanko, Jr, Chattanooga
Stanko, Jr, C

Wheelock, Argil Jerry, Chattanooga
*Whitaker Jr, L Spires, Chattanooga
White, J Johnny, Chattanooga
White, Phil Joe, Hixson
White, Phil Joe, Hixson
White, William Otis, Chattanooga
Williams III, Sam Jones, Chattanooga
Williams, Robert Henry, Chattanooga
Woods, Essie J, Chattanooga
Wright Jr, Kinsman E, Chattanooga
Yates, Carl D, Chattanooga
Yium, Jackson Joe, Chattanooga
Yood, Stephen H, Chattanooga
*Young, Geo G, Chattanooga
*Young, Marion Marshall, Chattanooga
Younger III, Robert E, Chattanooga
Zuckerman, Jos I, Chattanooga

COCKE COUNTY MEDICAL SOCIETY

*Armistead, Daniel, Newport *Armistead, Daniel, Newport
Brock, Karen Reno, Newport
Conway, Thomas W, Newport
Garbarino Jr, A J, Newport
Gray Jr, McDonald, Newport
Hood, Michael T, Newport
Johnson II, H Kenneth, Newport
Kickliter, David J, Newport
McConnell, David H, Newport
Valentine Jr, Fred M, Newport

COFFEE COUNTY MEDICAL SOCIETY

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Bard, Ralph M, Tullahoma
Bard, Shirley A, Tullahoma
Birdwell, Joel Stanley, Tullahoma
*Canon, Robt Maurice, Tullahoma
*Craig, Allen R, Tullahoma
*Craig, Allen R, Tullahoma
*Craig, Garen, Tullahoma
*Craig, Caren, Tullahoma
*Craig, Caren, Tullahoma
*Craig, Caren, Tullahoma
Bavis, Glenn Alan, Manchester
*Fisnbein, Richard, Tullahoma
Galbraith, Bruce E, Tullahoma
Galbraith, Bruce E, Tullahoma
George, Wilburn E, Winchester
Harris, George A, Manchester
Harris, George A, Manchester
Harvey, Chas Ben, Tullahoma
Kennedy, Jerry Ledford, Tullahoma
Kin, Ho Kyun, Tullahoma
Krick, Joseph G, Tullahoma
Lindsay, James, Tullahoma
Lindsay, James, Tullahoma
Milam, William M, Tullahoma
Milam, William M, Tullahoma
Morris, Hunter Willingham, Tullahoma
Romprasad, Mittur N, Tullahoma
Renner, Michael J, Tullahoma
Robison, B Keith, Tullahoma
Robison, B Keith, Tullahoma
Robison, B Keith, Tullahoma
Sethi, Brahm D, Manchester
Sethi, Chander M, Manchester
Sethi, Chander M, Manchester
Sethi, Chander M, Tullahoma
Simon, Keith J, Riverview, FL
Skukla, Sandip, Tullahoma
Simon, Keith J, Riverview, FL
Skukla, Sandip, Tullahoma
Vallejo, Francisco C, Tullahoma
Vallejo, Francisco C, Tullahoma
Vallejo, Luz A, Tullahoma
Woodfin Jr, Mose Clarke, Tullahoma
Woodfin Jr, Mose Clarke, Tullahoma
Woodfin Jr, Mose Clarke, Tullahoma
Vang, Harrison Y, Manchester
*Young, Coulter Smartt, Manchester
*Young, Coulter Smartt, Manchester Tullahoma

CONSOLIDATED MEDICAL ASSEMBLY OF

WEST TENNESSEE

Aguirre, Antonio, Jackson
Alexander, Clyde Vinson, Jackson
Anderson, Charles B, Jackson
Appleton Jr, James Roy, Jackson
Atkins, Jerry Franklin, Huntingdon
*Baker, Lt Cl John Q, Scottsdale, AZ
*Ballard, Thos K, Jackson
Barham, Harvey Haywood, Bolivar
Barker, Edward C, Trenton
Barnes Jr, James Walter, Jackson
Barnett II, Hugh glenn, Jackson
*Barnett, Robt J, Jackson
Bhat, Narayana B, Huntingdon
Bicknell, Sidney Lane, Jackson
Binsham, Ron Craig, Jackson
Binshop, John Myron, Somerville
Bond Jr, Elias King, Jackson
*Booth, Jack H, Jackson
Boyer, Jay A, Jackson
Bratton, Chris H, Lexington
Brueggeman, Michael, Jackson
Burleson, David G, Jackson
*Burnett, William Franklin, Jackson
*Burrus Jr, Swan, Jackson
*Burrus Jr, Swan, Jackson
*Burruth, Cynthia, Jackson
*Carruth, Larry, Jackson
*Chary, Kandala Ram, Jackson
Clark, Curtis B, Jackson
Correll, Donald Charles, Jackson WEST TENNESSEE

Couch, Billy Lanier, Humboldt
Cox, Chas Wm, Jackson
Craig, Carol Shannon, Jackson
Craig, Carol Shannon, Jackson
Craig, Sterling Ruffin, Jackson
Crenshaw, James Harris, Humboldt
Crocker, Edward F, Jackson
Crocker, Edward F, Jackson
Curlin, John Paschal, Jackson
Ourlin, John Paschal, Jackson
Ourlin, John Paschal, Jackson
DeGouza, Wm Celestino, Rutherford
Deming, Wood M, Jackson
Diffee, James, Jackson
Dowling, Clarey R, Brownsville
Driver Clarence, Jackson
Dowling, Clarey R, Brownsville
Driver Clarence, Jackson
Dowling, Jawes Harvid, Jackson
Dowling, Jawes Holling, Jackson
Edwards, Edwin Wiltz, Jackson
Edwards, Edwin Wiltz, Jackson
Edwards, Nicholas Henry, Grand Junction
Ellis, John W, Trenton
Ellis, John W, Trenton
Ellis, John W, Trenton
Ellis, John E, Jackson
Erb, Blair D, Jackson
Erb, Blair D, Jackson
Frields, James O, Milan
Fly, Randy, Jackson
Friedds, Jackson
Frost, Chas Lester, Bollivar
Garrard Jr, Clifford L, Jackson
Grayn, Milan
Grant, William M, McKenzie
Graves, Oliver Haltom, Jackson
Godvin, Stephen, Milan
Grant, William M, McKenzie
Graves, Oliver Haltom, Jackson
Hall, James Wilson, Trenton
Hall, Robt Crombie, Jackson
Hammond, Jere D, Jackson
Hammond, Stephen, Jackson
Harmon, Harvey, Jackson
Harmon, Harvey, Jackson
Harmon, Harvey, Jackson
Harmon, Harvey, Jackson
Herron, Chas Burkhead Jackson
Herron, Chas Burkhead Jackson
Herron, Chas Burkhead Jackson
Herron, Has Burkhead Jackson
Herron, Lajackson
House, Ben Fred, Jackson
House, Ben Fred, Jackson
House, Ben Fred, Jackson
House, Den Fred, Jackson
House, Janks Davidson, Jackson
House, Janes D, Selmer
Kirkland, Ronald H, Jackson
Lages, Jackson
Layde, Janes D, Jackson
Layde, Janes D, Jackson
Layde, Janes D, Jackson
Le

Musulier, Karl E, Jackson
Mueller, Alfred J, Jackson
Muir, Eric, Jackson
Muir, Eric, Jackson
Muhr, Lamb Bolton, Jackson
Neblett, John W, Jackson
Oberg, Richard A, Jackson
Owens, Scott Emerson, Jackson
Pakis Jr, George, Jackson
Patel, Hasmukh Dahyabhai, Trenton
Patel, Hasmukh Dahyabhai, Trenton
Patel, Harmy Lee, Selmer
Pennington, Frank R, Jackson
Peeler, Harry Lee, Selmer
Pennington, Frank R, Jackson
Peters, Jerry D, Jackson
Peters, Jerry D, Jackson
Peters, Jerry D, Jackson
Peters, Jerry D, Jackson
Phillips, John, Parsons
Phillips, Tony N, Jackson
Prichard, Frances E, Jackson
Prichard, Frances E, Jackson
Prichard, Frances E, Jackson
Ramer Jr, Warren Carlton, Lexington
Ramer Sr, Warren C, Lexington
Resee, Eugene P, Jackson
Rhea Jr, Karl, Somerville
Rhear, Rayne, Jackson
Rhea, Karl Byington, Somerville
Rhear, R Wayne, Jackson
Roberts, Wm H, Jackson
Robbins, Russell Hugh, Jackson
Robbins, Russell Hugh, Jackson
Robbins, Russell Hugh, Jackson
Roberts, Wm H, Jackson
Schlamp, Allen Lee, Jackson
Schlamp, Allen Lee, Jackson
Schlamp, Allen Lee, Jackson
Schlamp, Allen Lee, Jackson
Schartz, Paul E, Jackson
Schartz, Paul E, Jackson
Schart, John L, Jackson
Smelser, Michael Harding, Adamsville
Smith Jr, Montie E, Selmer
Smith, Robt Jos, Jackson
Smelser, Mothael Harding, Adamsville
Smith Jr, Montie E, Selmer
Smith, Robt Jos, Jackson
Smelser, Dob Tyler, Jackson
Smelser, Dob Tyler, Jackson
Smelser, Dob Tyler, Jackson
Stepp Jr, William P, Jackson
Toter, Rob Tyler, Jackson
Toter, Rob Tyler, Jackson
Toter, Kenneth, Jackson
Thomas, Geo Emanuel, Jackson
Thomas, James Louis, Jackson
Thomas, James Louis, Jackson
Welbes III, Edward Hunter, Jac

CUMBERLAND COUNTY MEDICAL SOCIETY

*Barnawell, James Ross, Crossville Baylosis, Roberto B, Crossville Bell, Christopher M, Crossville Bilbrey, Richard Lee, Crossville Bise, Stanley L, Crossville

Braun, Richard C, Crossville
Callis, James Taylor, Crossville
*Campbell Jr, James T, Crossville
Campbell, David Edward, Crossville
Clark, Jack Crowley, Crossville
Clark, Jack Crowley, Crossville
Clayton, Thomas Edward, Crossville
Cravens, R Gene, Crossville
*Deventerage, Philip M, Crossville
*Dougherty, John H, Fairfield Glade
Duer, Carl Thos, Crossville
Durham, Beatrice L, Crossville
*Ervin Jr, Paul A, Crossville
*Evans, Wm Elkinton, Crossville
Guthrie, Fred A, Crossville
Hall, Danny, Crossville
Ivey, R Donathan Miles, Crossville
Ivey, R Donathan, Crossville
Larson, Charles Adrian, Crossville
Lindsay, Jack Wasson, Rockwood
Litchford, David Williams, Crossville
Mayfield, Robert D, Crossville
Mayfield, Robert Crossville
Nichols, Robert, Crossville
Nichols, Robert, Crossville
Perrigan, Dale, Crossville
Perrigan, Dale, Crossville
Reed, Larry Dewayne, Crossville
Reed, Larry Dewayne, Crossville
*Seaton, Stuart P, Johnson City
Sentef, Mary, Crossville
Sherrill, John Branson, Crossville
*Seaton, Stoart P, Johnson City
Sentef, Mary, Crossville
*Wallace, Joe Kenneth, Crossville
*Wallace, Joe Kenneth, Crossville
Wood Jr, Robt Hancock, Crossville

DEKALB COUNTY MEDICAL SOCIETY

Blevins, Melvin Lee, Smithville Cripps, Hugh Don, Smithville Darrah, David Edward, Alexandria Hooper, Doug G, Smithville Puckett, Jerry E, Smithville Rhody, Jack R, Smithville

DICKSON COUNTY MEDICAL SOCIETY

Anderson, Stanley Martin, Dickson
Bell Jr, Walter A, Dickson
Blevins, Jerry C, Dickson
Brantly, Edmund Brook, Dickson
Close, Louis Ward, Dickson
Collins, Clyde E, Dickson
*Cook, Mary Baxter, Nashville
Drinnen, Danl Brooks, Dickson
Gordon, Jeffrey, Dickson
Gordon, Jeffrey, Dickson
Gorzny, Jan M, Dickson
Hutchens, Zachary McVey, Centerville
Jackson Jr, Lawrence Richard, Centerville
Jackson, James T, Dickson
Koomen, John C, Dickson
Luplow, Rolland, Dickson
Mani, Venk, Dickson
Mani, Venk, Dickson
Mills, Van F, Dickson
Morse, John C W, Dickson
Orgain, Robert W, Dickson
Plant, Richard Franklin, Dickson
Sexton, John Thomas, Centerville
Smith, Bobby Joel, Dickson
Thompson, Bill, Dickson

FENTRESS COUNTY MEDICAL SOCIETY

Allred, Baley Fred, Jamestown
Carroll, Leonard, Jamestown
Hensel, Albert Earl, Murfreesboro
Joshi, Dilip N, Jamestown
Kimbrell, Keith M, Crossville
Smith, Jack Calvin, Jamestown
Turner, Shelby Oscar, Clarkrange

FRANKLIN COUNTY MEDICAL SOCIETY

FRANKLIN COUNTY MEDICAL SOCIETY
Bagby Jr, Richard A, Winchester
Blanc, Peter, Winchester
Boyanton, Lia Cecilia, Cowan
Boyanton, Walter J, Estill Springs
Bryan, James Alfred, Winchester
Fort Jr, Dudley Clark, St Andrews
Greer, Patrick Roddy, Winchester
Hoolliman, James D, Winchester
Hoold, Dewey Woodrow, Decherd
Horton, Craig M, Winchester
Hubbard, Rex, Winchester
Johnson, Gerald Eugene, Winchester
Kennedy, Elaine, Winchester
Petrilla, Diane L, Sewanee
Petrochko, Nicholas, Winchester
Scarborough, Larry Keith, Monteagle
Smith, Thomas Anderson, Winchester
Stensby, James G, Winchester
Stensby, James G, Winchester
Templeton, John Waggoner, Winchester
Williams, Jenny Lynn, Winchester
Worthington, Bryan, Winchester
Zimmerman, Thomas F, Winchester

GILES COUNTY MEDICAL SOCIETY

*Agee, Robt B, Pulaski
Burger, Charles W, Pulaski
Cox, Malcolm A, Pulaski
Davis Jr, Buford Preston, Pulaski
Fentress, J Vance, Pulaski
Foronda, Armando Cabot, Pulaski
Haney, Charles D, Pulaski
Murrey, Wm Harwell, Pulaski
*Owen, Wm Kendrick, Pulaski
Owings, Jon M, Pulaski
Sakow, Henry A, Pulaski
Savage, Stephen Ross, Pulaski
Ziauddin, Mohamed, Pulaski

GREENE COUNTY MEDICAL SOCIETY

GREENE COUNTY MEDICAL SOCIETY

Aasheim, Richard J, Greeneville
Austin Jr, Joseph W, Greeneville
Austin Jr, Joseph W, Greeneville
Austin, Maynard Wade, Greeneville
Barnes, Lloyd Rogers, Greeneville
Bean, Michael Wm, Greeneville
Bean, Michael Wm, Greeneville
Beckner III, Thos Folsom, Greeneville
Buckman, David D, Greeneville
Chapman Jr, Walter Clay, Greeneville
Cobble, Douglas Catron, Greeneville
Cole, Ronald Arthur, Greeneville
Cole, Ronald Arthur, Greeneville
Easterly Jr, James F, Greeneville
Ellenburg Jr, Luke Lamar, Greeneville
Ellenburg, Luke L, Greeneville
Flohr, Robert Stephen, Greeneville
Flohr, Robert Stephen, Greeneville
Holt, Bevley D, Greeneville
Giles, Stanley A, Greeneville
Hott, Bevley D, Greeneville
Hoppe, Gordon Paul, Greeneville
Hoppe, Gordon Paul, Greeneville
Marsa, Gordon L, Greeneville
Marsa, Gordon L, Greeneville
Mason, Walter Lawrence, Greeneville
Mathews Jr, Kenneth M, Blountville
Mathiesen Jr, K Marlin, Greeneville
McKinney, James Ray, Greeneville
McKinney, James Ray, Greeneville
McKinel, Frank H, Mosheim
McNiel, Janet, McNiel, Greeneville
McSon, Harry C, Greeneville
McSon, Harry C, Greeneville
McSon, Harry C, Greeneville
McNiel, Kenneth Clark, Greeneville
Strange, E Brad, Greeneville
Strange, E Brad, Greeneville
Strange, E Brad, Greeneville
Strange, E Brad, Greeneville
Sullivan, Timothy, Greeneville
Webster, Thomas Moore, Greeneville
Webster, Thomas Moore, Greeneville
Webster, Thomas Moore, Greenevill

HARDIN COUNTY MEDICAL SOCIETY

Brown II, Joe Lawrence, Jackson Brown, Jane Warne, Jackson Churchwell, A Grigg, Savannah Greene, Richard S, Savannah Lard, Janet Kaye, Savannah Lay, John Danl, Savannah Peters, Joseph A, Savannah Rao, Gade, Savannah Roe, Thos Vance, Savannah Smith, Michael L, Savannah Thomas, Howard W, Savannah Thomas, James Howard, Savannah

HAWKINS COUNTY MEDICAL SOCIETY

Baird Jr, Renfro B, Rogersville Elkins, Larry H, Rogersville *Gibbons, William E, Rogersville Goyeau, Francis, Rogersville Huffman, Charles D, Rogersville Marcelo, Bernardino D, Rogersville Marcelo, Josefina Q, Rogersville

HENRY COUNTY MEDICAL SOCIETY

Adams, Robert D, Paris
Campbell, Wm Russell, Paris
Duckworth, Hugh, Paris
Garrett, Glenn Sanders, Paris
Griffey Jr, Walter P, Paris
Harrison, Terry O, Paris
Lee, Seung H, Paris
McGee, James W, Paris
*McIntosh, Barry Park, Paris
*Mobley Jr, Emmett P, Paris
Mobley Jr, Doe Dick, Paris
*Neumann Sr, John E, Paris
Norman, Dwight Michael, Paris
Robertson, James Buford, Paris

*Ross, Kenneth Guysteau, Paris Sleadd, Frank Bland, Paris Swanson, Roger Thomas, Paris Tusa, Vince Chas, Paris Walker, Charles Allen, Paris Wood, Thos Chas, Paris

JACKSON COUNTY MEDICAL SOCIETY

Byrne, Gregory L, Gainesboro Dudney, Elijah Morgan, Gainesboro

KNOXVILLE ACADEMY OF MEDICINE

Aaby, Gene Victor, Knoxville
*Acker, James Jos, Knoxville
Acker, John H, Knoxville
Acker, John H, Knoxville
Acuff, Wm Jos, Knoxville
Adams, Arthur F, Knoxville
Adams, Arthur F, Knoxville
Adams, Terry Lee, Knoxville
Adams, Terry Lee, Knoxville
Akin, Hobart E, Knoxville
Akin, Robt Louis, Knoxville
Alexander, J Sidney, Knoxville
Alexander, J Sidney, Knoxville
Ambrose, Paul Seabrook, Knoxville
Anderson, Mark D, Knoxville
Anderson, Thomas I, Knoxville
Anderson, Thomas I, Knoxville
Anderson, Thomas I, Knoxville
Andrews, Edmund B, Knoxville
Andrews, Edmund B, Knoxville
Anderson, Thomas I, Knoxville
Anderson, Thomas I, Knoxville
Anderson, Thomas I, Knoxville
Anderson, Toknoxille
Anderson, Toknoxille
Anderson, Toknoxille
Anderson, Alexander I, Knoxville
Anderson, Mark I, Knoxville
Anderson, Alexander I, Knoxville
Anderson, Stephen B, Knoxville
Arnold Jr, Henry Grady, Knoxville
Arnold Jr, Henry Grady, Knoxville
Avery, Robert Bruce, Knoxville
Avery, Robert Bruce, Knoxville
Avery, Mike, Knoxville
Bailey Jr, Wm Ross, Knoxville
Bailey Jr, Wm Ross, Knoxville
Bailey Jr, Wm Ross, Knoxville
Baker Jr, Paul D, Knoxville
Baker Jr, Paul D, Knoxville
Baker, James W, Knoxville
Baker, James W, Knoxville
Bares III, Robert L, Knoxville
Barnes III, Robert L, Knoxville
Barnen, Freddie T, Knoxville
Barnen, Freddie T, Knoxville
Barnen, Freddie T, Knoxville
Beals, Danl Franklin, Knoxville
Beals, Doe Duncan, Knoxville
Beals, Doe Duncan, Knoxville
Beals, Doe Duncan, Knoxville
Beals, Don Henry, Knoxville
Beals, John Henry, Knoxville
Beals, John Henry, Knoxville
Beals, John R, Knoxville
Beals, John R, Knoxville
Beals, John R, Knoxville
Bellingrath, Len F, Knoxville
Bellingrath, Len F, Knoxville
Bellingrath, Len F, Knoxville
Berend, Jake, Knoxville
Berend, Jake, Knoxville
Brake, Lynn French, Knoxville
Brakebill, Larry C, Knoxville
Brakebill, Larry C, Knoxville
Brakebill, Larry C, Knoxville

Bushkell, Lawrence L, Knoxville
Bushore, Martha J Smith, Atlanta, GA
Byrd, Wm Geo, Knoxville
Campbell JF, John B, Knoxville
Campbell, Morris Dean, Knoxville
Campbell, Morris Dean, Knoxville
Campbell, Morris Dean, Knoxville
Capps, Robert J, Knoxville
Capps, Robert J, Knoxville
Capps, Robert J, Knoxville
Carlson, C, Sanford, Knoxville
Catron, Donald Gibson, Knoxville
Catron, Donald Gibson, Knoxville
Catron, Donald Gibson, Knoxville
Caulple, Dan W, Knoxville
Caulple, Dan W, Knoxville
Caulple, Dan W, Knoxville
Chenry, Ronald R, Knoxville
Cherry, Ronald R, Knoxville
Cherry, Ronald R, Knoxville
Cherry, Ronald R, Knoxville
Christenberry Jr, Henry E, Knoxville
Christenberry Jr, K W, Knoxville
Coll, Robt Reland, Knoxville
Coln, Robt Reland, Knoxville
Collins, Mary Patricia, Knoxville
Collins, Mary Fatricia, Knoxville
Collins, Mary Fatricia, Knoxville
Collins, Mary Fatricia, Knoxville
Collins, Mary Fatricia, Knoxville
Collins, Dean Raymond, Knoxville
Colledon, Chas C, Oak Ridge
Congleton III, Lee, Knoxville
Conger, John Harrison, Knoxville
Conper, John Harrison, Knoxville
Conper, John Harrison, Knoxville
Coops, Pleas R, Knoxville
Corp, David Allan, Knoxville
Corpas, Pleas R, Knoxville
Copas, Pleas R, Knoxville
Debris, Milliam T, Loudon
Dodd, Susan Price, Knoxville
Deleces, Joseph S, Bnoxville
Deleces, Joseph S, Bnoxville
Deleces, Joseph S, Bnoxville
Deleces, Joseph S, Rnoxville
Polon, S, Marchal B, Knox

Framklin, Stephen R, Knoxville
Franklin, Stephen R, Knoxville
Freeman, Coy, Knoxville
Freeman, Coy, Knoxville
Frygr, T, John M, Knoxville
Frygr, T, John M, Knoxville
Frygr, Fred M, Knoxville
Gargiardi, Marty P, Knoxville
Gammeltoft, Karsten, Knoxville
Garnet Jr, Jos Isabel, Knoxville
Gardner, Brian H, Knoxville
Gardner, Wm Henry, Knoxville
Gardner, Wm Henry, Knoxville
Gardner, Wm Henry, Knoxville
Gardner, Wm Henry, Knoxville
Gerkin, David George, Knoxville
Gentry, Robt Homer, Knoxville
Gentry, Robt Homer, Knoxville
Gentry, Robt Homer, Knoxville
Gentry, Robt Homer, Knoxville
Gentin, David George, Knoxville
Gibson, Carl Eugene, Knoxville
Gibson, Carl Eugene, Knoxville
Gilespie, Richard Allen, Knoxville
Gilespie, Richard Allen, Knoxville
Gilespie, Richard Allen, Knoxville
Goldard, Kamilia F, Knoxville
Goldard, Kamilia F, Knoxville
Godvin, Chas Wayne, Knoxville
Godvin, Chas Wayne, Knoxville
Goode, Paul B, Knoxville
Goode, Paul B, Knoxville
Goode, Paul B, Knoxville
Goudle, D Stevenson, Louisville
Gould, Hovard R, Knoxville
Green, Daniel M, Knoxville
Green, Daniel M, Knoxville
Green, James Allen, Knoxville
Green, James Allen, Knoxville
Green, James Allen, Knoxville
Green, James Allen, Knoxville
Green, James H, Knoxville
Green, James Allen, Knoxville
Hall, Kolt Carl, Knoxville
Hall, Kolt Carl, Knoxville
Harn, Catherine E, Knoxville
Harn, T, Lenoir City
Hall, Don J, Knoxville
Hang, Jamshed U, Knoxville
Hang, Jamshed U, Knoxville
Hang, Jamshed U, Knoxville
Harris, Christopher D, Knoxville
Harris, Christopher D, Knoxville
Harris, Christopher D, Knoxville
Harrison, Wm Blair, Loudon
Hassell, David F, Knoxville
Harrison, Wm Blair, Loudon
Hassell, David F, Knoxville
Harrison, John E B, Knoxville
Harrison, John E B, Knoxville
Helder, Frederick Ma, Knoxville
Helder, Frederick Ma, Knoxville
Helder, Frederick Ma, Knoxville
Hode, Frederick Ma, Knoxville
Hode, Frederick Ma, Knoxville
Hode, Frederick Ma, Knoxville
Hode, Jeffery S, Gxoxville
Hode, Jeffery G, Knoxville
Hows, Mark Young, Knoxville
Howe, Mark Young, Knoxville
Howe, Mar

Johnson Jr, J Breess, Knoxville
Johnson, Jr, William Reeves, Knoxville
Johnson, Jorg Richard, Knoxville
Johnson, Jorg Richard, Knoxville
Johnson, Joe Breess, Knoxville
Jost, Michael E, Knoxville
Jost, Michael E, Knoxville
Jost, Michael E, Knoxville
Joyce, Margaret III, Ocean Springs, MS
Joyce, Margaret III, Margaret Mar

Miller, Christopher A, Knoxville
Miller, Michael M, Knoxville
Miller, Wichael M, Knoxville
Miller, Wichael M, Knoxville
Miller, Wichael M, Knoxville
Miller, Wichael M, Mroxville
Minardo, Joseph D, Knoxville
Minter, William J, Knoxville
Misthell, Donald Eugene, Lenoir City
Mitchell, Michael E, Knoxville
Mitchell, Michael E, Knoxville
Mitchell, Fhillip R, Knoxville
Mitchell ST, Foy B, Knoxville
Mitchell ST, Foy B, Knoxville
Mitchell ST, Foy B, Knoxville
Mondery, Jost Murphy, Knoxville
Montgomery J, John Lee, Knoxville
Montgomery, Jos Tucker, Knoxville
Montgomery, Jos Tucker, Knoxville
Montgomery, Jos Tucker, Knoxville
Montgomery, Jos Tucker, Knoxville
Moore Jr, Merrill Dennis, Knoxville
Moore Jr, Merrill Dennis, Knoxville
Moore, Robert Saylor, Knoxville
Moore, Robert Saylor, Knoxville
Mooren, Francisco G, Knoxville
Morgan, Travis Eugene, Knoxville
Musler, Steven Allen, Knoxville
Musler, Steven Allen, Knoxville
Musler, Tommy E, Knoxville
Musler, Tommy E, Knoxville
Musler, Tommy E, Knoxville
Musler, Tomer South, Knoxville
Musler, Tomer South, Knoxville
Musler, Tomer South, Knoxville
Musler, Tomer South, Knoxville
Musler, Fames David, Knoxville
Musler, James David, Knoxville
Musler, James David, Knoxville
Musler, James David, Knoxville
Musler, James David, Knoxville
Musler, Paul T, Knoxville
Musler, Paul T, Knoxville
Musler, Fames Mayle, Knoxville
Nelson Jr, John R, Knoxville
Nelson Jr, Wa Alexander, Knoxville
Nelson Jr, Wa Alexander, Knoxville
Nelson Jr, Wa Alexander, Knoxville
Nelson, Barl M, Knoxville
Nelson, Barl M, Knoxville
Noxon, Jean K, Knoxville
Nelson, Harry K, Knoxville
Noxon, Jean K, Knoxville
Noxon, Jean K, Knoxville
Noxon, Jean K, Knoxville
Noxon, Jean K, Knoxville
Pade, Romer Campbell, Knoxville
Pade, Romer Campbell, Knoxvill

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Purvis, John T, Knoxville
Rader, Gregg M, Knoxville
Rader, Karen T, Knoxville
Rader, Saren T, Knoxville
Rander, John A, Knoxville
Rankin, David M, Knoxville
Rankin, David M, Knoxville
Readson, Freeman L, Knoxville
Reed, Steven W, Knoxville
Reed, Steven W, Knoxville
Reed, Steven W, Knoxville
Reed, Marren G, Knoxville
Reed, Marren G, Knoxville
Reid, William Stuart, Knoxville
Reynolds, Charles W, Knoxville
Richards, Paul D, Knoxville
Richards, Paul D, Knoxville
Rist, Toivo E, Knoxville
Roberts, Jeffrey R, Knoxville
Roberts, Jeffrey R, Knoxville
Roberts, John Crawford, Knoxville
Rodgers, Jerry Ray, Norfolk, Va
*Rogers, Wm Klar, Knoxville
Rodgers, Jerry Ray, Norfolk, Va
*Rogers, Wm Klar, Knoxville
Rowe, Cecil Darrell, Knoxville
Rule, Javid Anthony, Knoxville
Rule, Javid Anthony, Knoxville
Rule, Kenneth Boyd, Knoxville
Rule, Kenneth Boyd, Knoxville
Rule, Kenneth Andrew, Knoxville
Rule, Kenneth Andrew, Knoxville
Rule, Kenneth Royd, Knoxville
Rutherford Jr, Chas E, Knoxville
Rutherford Jr, Chas E, Knoxville
Rutherford, Kyle Otis, Knoxville
Sandberg, Ronald Kenneth, Knoxville
Sandberg, Ronald Kenneth, Knoxville
Sandberg, Ronald Kenneth, Knoxville
Sanders, Jerry E, Knoxville
Saver, Christopher E, Knoxville
Scatian DJr, Jack E, Knoxville
Scatian DJr, Jack E, Knoxville
Scatian DJr, Jack E, Knoxville
Scate, James Hugh, Knoxville
Scate, James Hugh, Knoxville
Scate, David AH, Knoxville
Scate, David AH, Knoxville
Scate, David Herron, Oak Ridge
Scaymour, David G, Knoxville
Scate, David Herron, Oak Ridge
Scymour, David G, Knoxville
Sexton, David Herron, Oak Ridge
Scymour, David G, Knoxville
Scaton, David Herron, Oak Ridge
Scymour, David C, Knoxville
Scaton, David Herron, Oak Ridge
Scymour, David C, Knoxville
Shap, Robert J, Knoxville
Scaton, David Herron, Oak Ridge
Scymour, David C, Knoxville
Siddiqi, Naseemul Hag, Knoxville
Ssemer, John R, Knoxville
Siddiqi, Naseemul Hag, Knoxville
Simons, John D, Knoxvill

Toney III, Lee E, Knoxville
Toyohara, Hiroshi, Knoxville
Traylor, Thomas Reid, Knoxville
Treat, Elmer Lawrence, Knoxville
Trent, Billy Carl, Knoxville
Trivedi, Nayana M, Knoxville
Trivedi, Nayana M, Knoxville
Trivedil, Randall G, Knoxville
Trudell, Randall G, Knoxville
Truner, James Espy, Knoxville
Turner, James Espy, Knoxville
Tyler Jr, Wm Alexander, Knoxville
Urban, Donald A, Knoxville
Urban, Donald A, Knoxville
Uri, Margaret, Knoxville
Vandergriff, Wm Lowell, Knoxville
Vandergriff, Wm Lowell, Knoxville
Vick, George W, Knoxville
Vick, George W, Knoxville
Vick, George W, Knoxville
Vick, George W, Knoxville
Wakefield, Paul H, Knoxville
Walker, Bruce Edwin, Knoxville
Walker-Fillmore, Janice, Knoxville
Waller, David H, Knoxville
Waller, David H, Knoxville
Waller, Donald Edwin, Knoxville
Waller, Donald Edwin, Knoxville
Walters, William J, Knoxville
Walters, William J, Knoxville
Walton, Norman C, Knoxville
Walton, Norman C, Knoxville
Watson, David Theodore, Knoxville
Watson, David Theodore, Knoxville
Watson, David Theodore, Knoxville
Watson, David Theodore, Knoxville
White, Geoe Robt, Knoxville
Webber, Geo Robt, Knoxville
Webber, Geo Robt, Knoxville
Whitehurst, James H, Knoxville
Whiten, Donna Marie, Knoxville
Whiten, David D, Knoxville
Whiten, Robert F, Knoxville
Wolfe, J Frederick, Knoxville
Wolfe, J Frederick, Knoxville
Wooten, B David, Knoxville
Wooten, B David, Knoxville
Wooten, James P, Knoxville
Young, Vernon Hutton, Knoxville
Young, Vernon Hutton, Knoxville
Zi

LAKEWAY MEDICAL SOCIETY

LAKEWAY MEDICAL SOCIETY

Alexander, William King, Morristown
*Allen, Erman Dale, White Pine
Amador Jr, Jose Garcia, Morristown
Anderson, C Cole, Morristown
Andrews, Douglas Eugene, Morristown
Ashley, Holvor Walter, Morristown
Ballard, Peter Francis, Morristown
Barclay, Lee Roy, Morristown
*Bellaire, Mack J, Tulsa, OK
Blake, Cleland Conway, Morristown
*Booker, Burt L, Morristown
*Bryan, Leander C, Rutledge
*Bukeavich, Alfred Peter, Morristown
Bukovitz, Mary Elizabeth, Morristown
*Cawcod, David Clayton, Jefferson City
Chronis, Alex J, Knoxville
Chung, Sung Jang, Morristown
Cark, Peter, Morristown
Darby, Dewayne P, Jefferson City
*Duby Jr, Clarence Jos, Morristown
Ellis Jr, John W, Jefferson City
Ellis, Frank S, Morristown
Greene Jr, David Louis, Morristown
Greene Jr, David Louis, Morristown
Gutch III, Wm John, Morristown
Helms, Crampton Harris, Morristown
Helms, Crampton Harris, Morristown
Howard, Jessie Eugene, Jefferson City
Hunt, Robert M, Morristown
Jamison, R Alan, Morristown
Kim, Joo-Taek, Morristown

Kinser, John H, Morristown
Lindsey, Charles Hugh, Morristown
Little Jr, Frank B, Morristown
Lowry III, Orlanda R, Morristown
Lynch, Everette G, Morristown
McKnight, Russell Delbert, Morristown
McKemore, Wayne L, Morristown
McNeil, David Wyatt, Morristown
Merritt, O L, Dandridge
*Milligan, Frank Leslie, Jefferson City
Milligan, Leslie, Jefferson City
*Muncy, Estle Pershing, Jefferson City
Patton, Lance S, Jefferson City
Patton, Lance S, Jefferson City
Payne, Steven D, Morristown
Perez, Ivan, Morristown
Perez, Ivan, Morristown
Presutti, Henry J, Morristown
Reed, Paul Emory, Sneedville
Renner Jr, Omer Clyde, Morristown
Sams, Josiah B, Morristown
Scott, Chas Seale, Morristown
Tindall, J Raymond, Morristown
Tindall, J Raymond, Morristown
Wee Eng, Jose L, Morristown
Wee Eng, Jose L, Morristown
Vates, Raymond Bernard, Morristown
Zirkle, John W, Jefferson City

LAWRENCE COUNTY MEDICAL SOCIETY

Berry, Frances A, Lawrenceburg
Campbell Jr, Earl Roy, Lawrenceburg
Coble, Robert V, Lawrenceburg
Crowder Jr, Virgil Holt, Lawrenceburg
*Crowder, Virgil H, Lawrenceburg
*Pavidson, Boyd P, Lawrenceburg
Dobias, Matthew Charles, Lawrenceburg
Everett, Leon, Lawrenceburg
Garey, David L, Lawrenceburg
Henderson, Norman Leroy, Lawrenceburg
Hudgins, J Carmack, Lawrenceburg
Mangubat, Jaime Virata, Waynesboro
Mauricio, Lilia D, Lawrenceburg
Methvin, Ray Elwin, Loretto
*Parrish, Villard, Lawrenceburg
Syather Villard, Lawrenceburg
Staley, Homer Lee, Lawrenceburg
Staley, Homer Lee, Lawrenceburg
*Taylor, Carson E, Lawrenceburg
Thomas, Henry Lewis, Lawrenceburg
Turman, Alfred, Lawrenceburg

LINCOLN COUNTY MEDICAL SOCIETY

Ashby, Sam Michael, Fayetteville
Barnes, Larry W, Fayetteville
Cobb, Rudy Theodore, Fayetteville
Gowda, H R Mallappa, Fayetteville
Jones, William R, Fayetteville
*Marshall, Clyde B, Ardmore
McCauley, David R, Fayetteville
Morrison, Theresa, Fayetteville
Morrison, Theresa, Fayetteville
Norman, Warren T, Fayetteville
Norskov, Wm Richard, Fayetteville
Patel, Yashwant P, Fayetteville
*Patrick Jr, Thos Alex, Fayetteville
Ralston Jr, Fred, Fayetteville
*Spears, William Kyle, Fayetteville
*Toone, C Doyne, Myrtle Beach, SC
Westover, Robert A, Fayetteville
Whittemore, Paul Edward, Petersburg
Wingo, Carl Eugene, Fayetteville
*Young Jr, Richard Wilson, Fayetteville
Young, Wm Mc Kinney, Fayetteville

MACON COUNTY MEDICAL SOCIETY

Chitwood Jr, Chas C, Lafayette *Deck Jr, Marvin Edward, Lafayette

MARSHALL COUNTY MEDICAL SOCIETY

MARSHALL COUNTY MEDICAL SOCIETY

Alfredson, David G, Belfast
Bone, George, Lewisburg
Harnisch, Kurt, Lewisburg
*Leonard, John Clarence, Lewisburg
Lewis, Melvin Glenn, Lewisburg
*Morgan Jr, Harcourt A, Lewisburg
*Morgan Jr, Harcourt A, Lewisburg
Phelps Jr, Kenneth J, Lewisburg
*Phelps Jr, Kenneth J, Lewisburg
*Poarch, Wm Saxon, Lewisburg
*Poarch, Wm Saxon, Lewisburg
Rutledge, Jones Flanagan, Lewisburg
Sharma, N N, Lewisburg
Surber, Jerry Lee, Lewisburg
Tepedino, Michael J, Lewisburg
Vonalmen, Jos Franklin, Lewisburg
*Wolcott, Eugene S, Nunnelly

MAURY COUNTY MEDICAL SOCIETY

Andrews, Claudia S, Columbia
Ball, Charles A, Mount Pleasant
Barr, Ralph I, Columbia
Berry, Sidney A, Columbia
Brown, Jerry M, Columbia
Brown, John Preston Watt, Columbia
Choksi, Amit A, Columbia
Clifford Jr, Rufus R, Columbia
Cooper, Earnest H, Columbia

Dake, Thos Scott, Columbia
Daniels, David Allen, Columbia
Daniels, David Allen, Columbia
Davidson, Randall L, Columbia
Davidson, Randall L, Columbia
Davis, Karen Fisher, Mt Pleasant
Davis, Patricia Clifford, Columbia
Denney, Thomas Wade, Columbia
Ferrell, Harold Wiley, Columbia
Ferrell, Harold Wiley, Columbia
Fitts Jr, James Morgan, Columbia
Gardner, Benny A, Columbia
Gardner, Benny A, Columbia
Gardner, Benny A, Columbia
Gardner, Benny A, Columbia
Harmon Jr, Roy F, Columbia
Harwell, Valton Carden, Columbia
Hawsmann, Jan M, Nashville
Heard, George J, Columbia
*Helm, Harry C, Columbia
Hunter, Thomas A, Columbia
Hunter, Thomas A, Columbia
Selley, James Brinkley, Columbia
Kuykendall, Sam J, Columbia
Kuykendall, Sam J, Columbia
Kuykendall, Sam J, Columbia
*Laya, Ambrose M, Columbia
Lay, Allyn Monroe, Columbia
Lay, Allyn Monroe, Columbia
Marshall, James H, Columbia
Marshall, James H, Columbia
Mayfield Jr, Geo Radford, Columbia
Maguer, Curtis Austin, Columbia
MoGuyer, Curtis Austin, Columbia
MoGuyer, Curtis Austin, Columbia
Monroe, Linda P, Columbia
Monroe, Linda P, Columbia
Ouens, Susan Jennings, Columbia
Parry, Stephen Edwin, Columbia
Parry, Stephen Edwin, Columbia
Parrott, Earl Quinton, Columbia
Parrott, Earl Quinton, Columbia
Parrott, Earl Quinton, Columbia
Robinson II, Wallison, Columbia
Sisk, Andrew Webb, Columbia
Sisk, Andrew Webb, Columbia
Sisk, Andrew Webb, Columbia
Siith, Renneth Dale, Culleoka
Sondhi, Satish K, Columbia
Siith, Renneth Dale, Culleoka
Sondhi, Satish K, Columbia
Siith, Kenneth Dale, Columbia
Winson, Janice Marie, Columbia
Winton, Dannon Frederick, Columbia
Wilburn, Charles Diller, Columbia
Wilburn, Charles Diller, Columbia
Wilburn, Charles Diller, Columbia
Wilburn, Charl

MCMINN COUNTY MEDICAL SOCIETY

McMINN COUNTY MEDICAL SOCIETY

Ackaouy, Geo E A, Athens
Bledsoe Jr, Robert E, Athens
Bolin, William R, Athens
Bowers, Wm Richard, Athens
*Boyce, James Reid, Athens
Breeden, Kimberly T, Athens
Brumback, Daniel Christian, Athens
Burroughs II, Wallace F, Athens
*Claveland, James Franklin, Englewood
Cox, Charles Boggess, Etowah
Davis, Wm Mayfield, Athens
Denton, Stephen L, Athens
Denton, Stephen L, Athens
Foree Jr, Wm Edwin, Athens
Hargis, Larry Jackson, Athens
Hewgley Jr, Robert G, Athens
Hewgley, Isham Cason, Athens
Hewgley, Robt Gardner, Athens
Holliday, H Joseph, Athens
*Jones, Milnor, Athens
Lee, Yung Gil, Etowah
Lemings, Stephen, Loudon
Lett, Michael F, Athens
Martin, Clyde, Athens
Martin, Clyde, Athens
Martin, Clyde, Athens
Mitchell Jr, Foy B, Athens
Mitchell Jr, Foy B, Athens
Mokal, Albert Joseph, Loudon
*Montgomery Sr, John L, Knoxville
Morris, Wm Gourrier, Athens
*Powell, Jess A, Athens
Schwiger, Paul, Athens
Schwiger, Paul, Athens
Sharpe, Charles Richard, Athens
Slowey III, James Fergus, Athens

Snider, Iris G, Athens Soni, Harish Babulal, Etowah Soni, Renuka Harish, Etowah *Trotter, Robt Wm, Athens Wallace, Jeffery, Athens *Whittle Jr, Herbert P, Loudon Williams, Thos Wolford, Etowah

MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY

Abell, Thomas, Memphis
*Ackerman, Robt F, Memphis
Adams Jon David Lee, Memphis
Adams Jr., Wm Milton, Memphis
Adams Jr., Wm Milton, Memphis
Adams, John Robert, Memphis
Adams, John Robt, Memphis
Adams, Lorenzo H, Memphis
Adams, Robert Franklin, Memphis
Adams, Robert Franklin, Memphis
Addams, Robert Franklin, Memphis
Addams, Robert L, Memphis
Addock III, Frank John, Cordova
Addington, Milton Brent, Memphis
*Adkins, Henry Leigh, Memphis
*Adderl Justin H, Memphis
Adwell Jr, Charles Edward, Memphis
Adwell Jr, Charles Edward, Memphis
Akurazian, Garabed Hagop, Memphis
Akins, Charles D, Memphis
Akins, Charles D, Memphis
Akins, Steven L, Memphis
Akins, Steven L, Memphis
Albritton, John Fortune, Memphis
Alleritton, John Fortune, Memphis
Alleritton, John Fortune, Memphis
Alliz, Zenab Ahmed, Memphis
Aller, Chester G, Memphis
Allen, Chester G, Memphis
Allen, Chester G, Memphis
Allen, Chester G, Memphis
Allen, Mark L, Memphis
Allen, Mark L, Memphis
Allen, James Mark, Memphis
Allen, James Mark, Memphis
Allen, James Mark, Memphis
Anderson, Joe Pat, Memphis
Anderson, Marsha S, Denver, Co
Anderson, Joe Pat, Memphis
Anderson, Weith, Memphis
Anderson, Keith, Memphis
Anderson, Weith, Memphis
Anderson, Weith, Memphis
Anderson, Weith, Memphis
Arnishanslin, Donald N, Collierville
Apperson, John W, Memphis
Arnishanslin, Donald N, Collierville
Apperson, John W, Memphis
Arkin, Chas Richard, Memphis
Arkin, Juni Lindsay, Memphis
Arkin, Juni Lindsay, Memphis
Arkinson, Richard Agard, Memphis
Arkinson, Richard Agard, Memphis
Atkinson, Richard Agard, Memphis
Baser, Jose, Memphis
Balen, Geo Franklin, Memphis
Baher, Jose, Memphis
Baher, Irvin C, Memphis
Baher, Jose, Memphis
Baher, Jose, Memphis
Balen, Geo Franklin, Memphis
Barn, James R, Memphis
Barn, James R, Memphis
Barnes, Grover W, Memphis
Baer, Jose, Memphis
Bearden, Charles R, Memphis
Bearden, Charles R, Memphis
Bearlet, Joseph C, Memphis
Bearden, Charles R, Memphis
Bearden, J

Bicks, Richard O, Memphis
Biclskis Jr, William M, Memphis
Biggs, Jack, Southaven, MS
*Biles Jr, James D, Memphis
Birdsong Jr, Emmitt S, Memphis
Bishop, Calvin R, Memphis
Bisson, Wheelock A, Memphis
Blackburn, Richard E, Memphis
Blackburn, Richard E, Memphis
Blair, John Rodney, Memphis
Blair, John Rodney, Memphis
Blair, John Rodney, Memphis
Blaid Jr, Basil A, Memphis
*Bland Jr, Basil A, Memphis
*Bland Jr, Basil A, Memphis
Blumenfeld, Frances Gwen, Memphis
Blumenfeld, Frances Gwen, Memphis
Blumenfeld, Frances Gwen, Memphis
Boals III, Jos Calloway, Memphis
Boals III, Jos Calloway, Memphis
Bools, James Wm, Germantown
Boatman, Brian Glen, Memphis
Booh, Robert M, Memphis
Booh, Robert M, Memphis
Boom, Alan Dexter, Memphis
Boone, James E, Memphis
Boone, James E, Memphis
Boone, James E, Clarksdale, MS
Bourland, Mar Jandess, Memphis
Boswell, James Lionel, Memphis
Boswell, James Lionel, Memphis
Boswell, James Lionel, Memphis
Boulden, Thomas F, Memphis
Boulden, Thomas F, Memphis
Bourland, Wm Landess, Memphis
Bourland, Wm Landess, Memphis
*Bourland, Wm Landess, Memphis
Bourland, Wm Landess, Memphis
*Browl, Michael Batson, Memphis
*Brady, Boyer M, Memphis
*Brady, Boyer M, Memphis
Brattley, J Hays, Memphis
Brattley, J Hays, Memphis
Brantley, Minchael S, Memphis
Brooks, Arnold D, Memphis
Brooks, Maria Teresa, Lakeland
Brown, Mm Raymond, Cordova
Bridges, James T, Memphis
Bronstein, Mulry W, Memphis
Brontein, Mulry W, Memphis
Brontein, Maury W, Memphis
Bronk, Ann Dail, Memphis
Brooks, Brown, Memphis
Brooks, Brown, Memphis
Brown, James W, Memphis
Brow

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Charles, Steve, Memphis
Chase, Nancy Ann, Memphis
Chauhan, Dinesh N, Germantown
Cheatham, Charles P, Germantown
Cheek, Richard Calvin, Memphis
Chesney, Carolyn M, Memphis
Childers, Jennifer W, Memphis
Childers, Jennifer W, Memphis
Chisoln, John Cobeen, Memphis
Christopher, Robt Paul, Memphis
Chuang, Howard J, Memphis
Clarlan, Goger Stephen, Memphis
Clarlan, Fr. Dwight Witt, Memphis
Clark, John Douglas, Cordova
Clark, John Douglas, Cordova
Clark, John Douglas, Cordova
Clark, John Douglas, Cordova
Clark, Gatherine Jane, Memphis
Clarke, Catherine Jane, Memphis
Clarke, Catherine Jane, Memphis
Clarke, Catherine Jane, Memphis
Clarke, Catherine Jane, Memphis
Clarke, Markey, Memphis
Clock, Christopher H, Columbia
-Clifton II, Bobby G, Leoma
Clogston, Charles, Memphis
Cocke Jr, Edwin W, Memphis
Cocker Jr, Edwin W, Memphis
Cocle III, William L, Memphis
Cole Jr, F Hammond, Memphis
Cole, Frencis Hammond, Memphis
Cole, Frencis Hammond, Memphis
Cole, Frederick L, Memphis
Collins, Frank H, Memphis
Conrad, Lynn, Memphis
Conrad, Lynn, Memphis
Cooper, Charlie Walter, Memphis
Corpeland, Geo D, Memphis
Corpeland, Stuart R, Memphis
Corpeland, Geo D, Memphis
Corpeland, Geo D, Memphis
Corpeland, George S M, Memphis
Corpeland, Geor

-Dodson, Mark Andrew, Kenner, LA
Dohan Jr, Francis Curtis, Memphis
Donahue, David J, Memphis
Dorian, John Bernard, Memphis
Dorroh, Charles William, Memphis
*Dowling, Chas Victor E, Memphis
Drake, Arnold Mannas, Memphis
Drenning, Paul Thomas, Memphis
Drewry Jr, Richard Danl, Memphis
Duberstein, Larry Edwin, Memphis
Duberstein, Larry Edwin, Memphis
Duckworth, John Kelly, Nesbit, MS
Duckworth, Nancy C H, Memphis
Dugdale, Marion, Memphis
*Duke, Don DeWindle, Memphis
Dunay, Dan Holley, Memphis
Dunavant Jr, Wm David, Memphis
Dunavant, Wm David, Memphis
Dunavay, Dan Alexander, Memphis
Duncan, Jerald Mark, Memphis
Duncan, Jerald Mark, Memphis
*Duncan, Thane Edward, Arlington
Duncan-Cody, Barbara A, Memphis
*Sunfey, John Quincy, Memphis
Eason, Hamel Bowen, Germantown
Eason, Leslie Edmund, Memphis
Eastmead, Donald Joseph, Memphis
Economides, Nicholas-John, Memphis Eastmead, Donald Joseph, Memphis Economides, Nicholas-John, Memphis Edelson, Michael L, Memphis Edelson, Michael L, Memphis Edmonson, James D, Memphis Edmonson, Allen S, Memphis Edwards Jr. Lelon O, Memphis Edwards, Mark S, Memphis Edwards, Mark S, Memphis Edwards, Neil B, Memphis Efrid III, Walter Guy, Memphis Eggers, Frank M, Memphis Eldridge, Russell M, Memphis Eldridge, Russell M, Memphis Eldridge, Russell M, Memphis Eldridge, Russell M, Memphis Emerson, Shane, Memphis Emerson, Shane, Memphis Emerson, Donald Stewart, Memphis Emost, James K, Germantown Entman, Howard, Memphis Ernis, Richard Lyn, Memphis Ersets, Dale Nichols, Memphis *Etteldorf, J N, Memphis *Etteldorf, J N, Memphis *Etteldorf, J N, Memphis *Everst Jr. Bennett E, Memphis *Everst Jr. Bennett E, Memphis Fabian, Timothy Charles, Memphis Falvey, William Davis, Memphis Fanning, David, Memphis Fanning, David, Memphis Farrar, Turley, Pelzer, SC *Farrow Jr. C Creston, Cordova -Fee, Kirk A, Memphis Feild, James Rodney, Memphis Feild, James Rodney, Memphis Feler, Claudio A, Memphis Feler, Claudio A, Memphis Fersus, John Mitchell, Memphis Ferguson, John Mitchell, Memphis Ferguson, John Mitchell, Memphis Fink, Robert David, Memphis Fink, Gary Martin, Memphis Fink, Gary Martin, Memphis Fink, Gary Martin, Memphis Fink, Cary Martin, Memphis Fink, Cary Martin, Memphis Finn, Cary Martin, Memphis Francis, Jun Durant, Memphis Finn, Cary Martin, Memphis Frong, Terry, Germantown Folse, Timothy, Memphis Footer, Momphis Footer, Max Memphis Ford, Max Malan, Memphis Francis Jr, Hugh, Memphis Francis Jr, Hugh, Memphis Francis Jr, Hugh, Mem

*French, Wm E, Germantown
Friedman, Harry, Memphis
Friedman, Harry, Memphis
Friedman, Harry, Memphis
Furr, Philip Marvin, Memphis
Fuste, Ricardo R, Key Biscayne, FL
Futrell, Thomas Walter, Memphis
Gadomski, Regina T, Memphis
Gailnes, Kenneth J, Memphis
Galines, Kenneth J, Memphis
Galiyan, James R, Memphis
Galyan, James R, Memphis
Galyan, James R, Memphis
Gardner, John Harvey, Memphis
Gardner, John Harvey, Memphis
Gardner Jr, Lawrence G, Memphis
Gardner, John Harvey, Memphis
Garrett Jr, Harvey E, Memphis
Garvent Jr, Harvey E, Memphis
Gavant, Morris Leonard, Memphis
Gavin, Michael W, Memphis
Gavin, Michael W, Memphis
Gayden, John O, Memphis
Gedeter, Barbara E, Memphis
Gedeter, Barbara E, Memphis
Geno, Timothy Harry, Memphis
George, James W, Memphis
George, James W, Memphis
George, James W, Memphis
George, James W, Memphis
George, Morris, Memphis
George, Morris, Memphis
George, Morris, Memphis
George, James C, Memphis
George, James C, Memphis
Gettelfinger, Thomas C, Memphis
Geilluly, John Jos, Memphis
Gilluly, John Jos, Memphis
Gillunore, James C, Memphis
Gillore, James C, Memphis
Gilore, James Robt, Sylvester, GA
Glazer, Louis, Memphis
Gioder, James Robt, Sylvester, GA
Glazer, Louis, Memphis
Godown, Jack A, Memphis
Godown, Jack A, Memphis
Godom J, Jack A, Memphis
Grary, Kevin G, Jackson
Green, Heather Diane, Memphis
Graves, J, Christopher, Memphis
Graves, J, Christopher, Memphis
Graves, J, Christopher, Memphis
Graves, J, Christopher, Memphis
Handord, Jack Roll, Memphis
Handord, Jack Roll, Memphis
Handord, Jack Roll, Memphis
Handord, Jack Roll, Memphis
Hamlor, Handord, Mem

Harriman, Mark S, Memphis
Harrington, Oscar B, Memphis
Harris, Suhord Terrell, Memphis
Harris, John Joel, Memphis
Hasen JT, Howard B, Memphis
Hasen, Howard B, Memphis
Haken, Try Fred E, Memphis
Haken, C Douglas, Marco Island, FL
Hawkes, Alfred Kenneth, Memphis
Hawkes, C Douglas, Marco Island, FL
Hawkins, Andrew F, Little Rock, AR
Hay, Cyril Leon, Memphis
Hayes Jr, William R, Memphis
Hayes Jr, William R, Memphis
Hayes Jr, William R, Memphis
Hayes, Mar Timothy, Memphis
Haykal, Radwan F, Memphis
Haykal, Radwan F, Memphis
Hayal, Radwan F, Memphis
Hayen, Arthur Stacey, Memphis
Healey, Arthur Stacey, Memphis
Hellan, Michael D, Memphis
Hellan, Michael D, Memphis
Hellan, Johnald Claude, Memphis
Hellan, Johnald Claude, Memphis
Henley III, Russell, Memphis
Henley III, Russell, Memphis
Henrera, Fernando A, Memphis
Herrera, Fernando A, Memphis
Hidt, Gyr, James H, Memphis
Hidt, Faramarz F, Memphis
Hickey Jr, Homer David, Memphis
Hickerson, William L, Memphis
Hiddaji, Faramarz F, Memphis
Hiddaji, Faramarz F, Memphis
Hill, Dannis Alan, Memphis
Hill, Pamela McQuillen, Memphis
Hill, Panela McQuillen, Memphis
Hill, Panela McQuillen, Memphis
Hill, James Mark, Evansville, IN
Hill, John Roy, Memphis
Hill, Panela McQuillen, Memphis
Hill, Danis Alan, Memphis
Holoan, Mark Sidney, Memphis
Hill, Danis Alan, Memphis
Hollan, Walter Memphis
Hill, Danis McWert, Memphis
Holland, Walter Memphis
Hill, Danis McWert, Memphis
Hill, Danis McWert, Memphis
Hill, Danis McWert, Memphis
Hill, Danis McWert, Memphis
Hill, James Mark, Wemphis
Hill, Danis McWert, Memphis
Hill, James Mark, Wemphis
Hill, Holland, Carol, Memphis
Hudgha, John Kover, Memphis
Hudgha, John Kover, Memphis
Hudgha, John Werter, Memphis
Hudgha, John Werter, Memphis
Hudgha, John Power, Memphis
Hudgha, John Power, Memphis
Hudgha, John Power, Memphis
Judes, Mark Miden, Memphis
Juacher, John David, Memphis
Jackson, John Barks, Memphis
Jackson, David Keith, Mem

Johnson, Alex W, Lexington, KY
-Johnson, James Gibb, Memphis
Johnson, James K, Cordova
Johnson, Larry Holliday, Memphis
Johnson, Ronald Jackson, Memphis
-Jones, Jeffrey N, Memphis
-Jones, Jeffrey N, Memphis
-Jones Jr, Sidney D, Memphis
-Jones Jr, Sidney D, Memphis
Jones Jr, Sidney D, Memphis
Jones, Joe Paul, Memphis
Jones, Ruby, Southaven, MS
Jones, Ruby, Southaven, MS
Jones, Robt Riley, Memphis
Jordan, Oakley C, Memphis
Jordan, Oakley C, Memphis
Jordan, Oakley C, Memphis
Joyner, Royce Etienne, Memphis
-Julich, Arthur Wilson, Memphis
-Julich, Arthur Wilson, Memphis
-Kanin, Endu Ron, Memphis
-Kanin, Endu Ron, Memphis
-Kanin, Endu Ron, Memphis
-Kanin, Edward Staven, Memphis
-Kanjan, Robt Joel, Memphis
-Kaplan, Robt Joel, Memphis
-Kaplan, Robt Joel, Memphis
-Kaplan, Robt Joel, Memphis
-Kasese-Wahid, Laila, Memphis
-Kasselberg, Lyman A, Memphis
-Kasselberg, Lyman A, Memphis
-Kasselberg, Lyman A, Memphis
-Kasselberg, Lyman A, Memphis
-Keizer, Laverne R, Memphis
-Keizer, Laverne R, Memphis
-Keizer, Laverne R, Memphis
-Keilett, Gary Leon, Memphis
-Keilett, Gary Leon, Memphis
-Kellettmann, Arthur L, Memphis
-Kellett, Gary Leon, Memphis
-Kendrick Jr, William Riley, Memphis
-Kendry, A Franklin, Germantown
-Kerlan, Robt Ashley, Memphis
-Kendry, Gary, Memphis
-King Tong Arthur, Memphis
-King Arady Arthur, Memphis
-King, Paul, Memphis
-King, Paul, Memphis
-King, Paul, Memphis
-King, Paul, Memphis
-King, Halliam Scott, Memphis
-King, Halliam Scott, Memphis
-King, Andrew Halliam, Memphis
-Kinght, John Michael, Memphis
-Kirschman, Jeffrey C, Memphis
-Kingth, John Michael, Memphis
-Kingth, John Michael, Memphis
-Kingth, John Michael, Memphis
-Kingth, John Michael, Memphis
-Kundh, Abada, Memphis
-Kang, Memphis
-Kang, Memphis
-Kang, Memphis
-Kang, Memphis
-Laven, Robt Edward,

Lee, Ling Hong, Memphis
Lee, Sidney Reaves, Memphis
Lee, Sidney Reaves, Memphis
Leterits, Aaron M, Deerfield Beach, FL
Lemmi, Helio, Memphis
Leumi, Helio, Memphis
Leventhal, Marvin R, Memphis
Levitch, Melyna Abraham, Memphis
Levitch, Melyna Abraham, Memphis
Levitch, Melyna Abraham, Memphis
Levits, Myron, Memphis
Lieberman, Gerald J, Memphis
Lieberman, Phillip Louis, Memphis
Lieberman, Phillip Louis, Memphis
Lieberman, Filiary Francis
Memphis
Lindermuth, John R, Memphis
Lindermuth, John R, Memphis
Ling, Frank W, Memphis
Ling, Frank W, Memphis
Ling, Frank W, Memphis
Lipscomb, Alys H, Memphis
Lipscomb, Cary H, Memphis
Lipscomb, Gary H, Memphis
Little Jr, William R, Memphis
Little Jr, William R, Memphis
Little Jr, William R, Memphis
Liote, Thome E, Memphis
Liote, Thome E, Memphis
Loon, Massedward, Memphis
Long, Thomas E, Memphis
Long, Thomas E, Memphis
Long, Thomas E, Memphis
Long, William E, Memphis
Loug, William E, Memphis
Loug, William E, Memphis
Lougheed, Jos C, Memphis
Liverior, Jeffrey Ray, Memphis
Liverior, Martha A, Memphis
Liverior, Martha A, Memphis
Liverior, Wartha A, Memphis
Liverior, Wartha A, Memphis
Liverior, Wartha A, Memphis
Liverior, Seward Hays, Memphis
Lunceford, Travis' E, Memphis
Lylch, Michael Hardy, Memphis
Lynch, Michael Hardy, Memphis
Mabry Jr, Edward Hays, Memphis
Mabry Jr, Edward Hays, Memphis
Maddux Jr, H Benjamin, Memphis
Maddux An Lote Lundell, Memphis
Maddux An Homphis
Maddux Hot Benj Memphis
Maddux Jr, H Benjamin, Memphis
Macker, Howard Wa, Memphis
Marchall, Jainie, Memphis
Marchall, Jainie, Memphis
Marchall, Jainie, Memphis
Merrit, Janes Rarl, Memphis
McCoun, Landel Joe, Memphis
McCoun, Landel Joe, Memphis
McCoun, Landel Joe, Memphi

DECEMBER, 1991 617

Meyer, David, Memphis
*Miles, Robt Millard, Memphis
*Miler, Robt Millard, Memphis
*Miller, Marvin Tyrone, Memphis
Miller, Marvin Tyrone, Memphis
Miller, Fountain Fox, Memphis
Miller, Mark P, Cordova
*Miller, Richard B, Memphis
Miller, Romas Iva, Memphis
*Miller, Romas Iva, Memphis
*Miller, Romas Iva, Memphis
*Miller, Memphis
*Moler, Everett C, Memphis
*Mochley, Everett C, Memphis
*Moolly, Everett C, Memphis
*Moolly, Everett C, Memphis
*Moolly, Everett C, Memphis
*Moolly, Everett C, Memphis
*Mongan, Thomas W, Memphis
*Mongan, Thomas W, Memphis
*Mongan, Thomas W, Memphis
*Mongan, Thomas W, Memphis
*Monore Jr, Roller, Memphis
*Moore, David F, Memphis
*Moore, David F, Memphis
*Moore, David F, Memphis
*Moore, David F, Memphis
*Moore, James A, Memphis
*Moore, James A, Memphis
*Morris, Glenn Scott, Memphis
*Morris, Glenn Scott, Memphis
*Morris, John Thos, Memphis
*Morris, John Thos, Memphis
*Morris, John Thos, Memphis
*Morris, John Thos, Memphis
*Morrison, Mehael Burch, Memphis
*Morrison, Michael Burch, Memphis
*Morrison, Memphis Hunch
*Morrison, Memphis
*Morr

Palmer IV, Robert E, Memphis
Palmieri, Genaro Miguel A, Memphis
Palmieri, Sevier, Ana K, Memphis
Pang Jr, Jim, Germantown
Panovec, Parker, Rome, GA
Parker, Donald W, Memphis
Parker, Jos, Memphis
Parker, Jos, Memphis
Parks, Frank D, Collierville
Parnell Jr, Donald Hudson, Memphis
Parrott Jr, Chas Wm, Memphis
Parrott Jr, Chas Wm, Memphis
Parrott Jr, Chas Wm, Memphis
Parvey, Louis, S, Manter Germantown
Passlawski, Walter Germantown
Passter, Saml, Santamunich, CA
Pasternack, Morris, Memphis
Patce, Joseph E, Memphis
Patce, Joseph E, Memphis
Patce, Joseph E, Memphis
Pate, Joseph E, Memphis
Pate, Joseph E, Memphis
Patterson, Kirsten J, Memphis
Patterson, Kirsten J, Memphis
Patterson, Charles Richard, Memphis
Patterson, Charles Richard, Memphis
Patterson, Charles Richard, Memphis
Patterson, Sam Polk, Collierville
Patterson, Sam Polk, Comphis
Paul, Raphaeł Nathan, Memphis
Paul, Raphaeł Nathan, Memphis
Paul, Raphael Nathan, Memphis
Pedigo, Phillip Adler, Memphis
Pedigo, Phillip Adler, Memphis
Pedigo, Phillip Adler, Memphis
Perryman, Paul Edward Memphis
Perryman, Paul Edward Memphis
Perryman, Paul Edward Memphis
Phillips, David L, Memphis
Phillips, David L, Memphis
Phillips, Dary E Gward, Memphis
Phillips, Barry Brent, Germantown
Phillips, Berry Clyde, Memphis
Phillips, Berry Erry Clyde, Memphis
Phillips, Berry Rich Memphis
Phillips, We Earl, Memphis
Phillips, We Earl, Memphis
Phillips, We Earl, Memphis
Phillips, We Earl, Memphis
Phillips, We Carl, Memphis
P

Richardson III, Robert L. Memphis
Richardson JII, Robert L. Memphis
Richardson JII, Robert L. Memphis
Richardson J. Robert Greer, Memphis
Richardson, Elbert Greer, Memphis
Riggs Jr, Wm Webster, Memphis
Riggs, Chas R. Memphis
Riggs, Chas R. Memphis
Roberts, Barry A, Memphis
Robane, Jourdan Archibald, Memphis
Robbins Jr, Samuel Gwin, Memphis
Robbins, Edward T. Memphis
Robertson, James Thos, Olive Branch, MS
Robinson, James A, Remphis
Robinson, James A, Remphis
Robinson, James A, Remphis
Robinson, Wiley Thomas, Remphis
Robertson, William M, Memphis
Rosensweig, Jacob, Memphis
Rosen, Gerald Michael, Memphis
Rosenberg, E William, Memphis
Rosenberg, Ewilliam, Memphis
Rosenberg, Ewilliam, Memphis
Rosenberg, Tachary, Memphis
Rosenberg, Tachary, Memphis
Rosenberg, Zachary, Memphis
Rosenberg, Tachary, Memphis
Russell Jr, John Murray, Memphis
Russell, Thomas Anthony, Memphis
Russell, Thomas Anthony, Memphis
Salazer, Jorge E, Memphis
Salazer, Jorge E, Memphis
Sandor, B Jeffrey, Memphis
Sandor, James D, Memphis
Sandor, Phanesher, Memphis
Sandor, B Jeffrey, Memphis
Sandor, Robert Alery, Memphis
Schettler, Betty J, Memphis
Schettler, Webphis
Schettler, Webphis
Schettler, Memphis
Schettler, Memphis
Shapiro, Marv

Simpson, Joe Leigh, Memphis
Sims, Clifford W, Memphis
Sisk, Thos David, Memphis
*Sissman, Paul R, Memphis
*Sissman, Paul R, Memphis
*Skaggs, Marvin Richard, Memphis
*Skinner, Edward Folland, Memphis
Slutsky, Avron Abe, Memphis
*Smidy, Joseph C, Memphis
*Smith, Joseph C, Memphis
*Smith, Jr, Vernon I, Memphis
*Smith Jr, Vernon I, Memphis
*Smith, Jr, Walliam Allen, Memphis
*Smith, Arthur R, Memphis
*Smith, Arthur R, Memphis
*Smith, Jeffrey Clark, Germantown
*Smith, Stanley L, Memphis
*Smith, Stanley L, Memphis
*Smith, Vincent D, Memphis
*Smith, Wincent D, Memphis
*Smith, Wincent D, Memphis
*Smith, Wincent D, Memphis
*Smith, Wincent D, Memphis
*Snith, Wochapman, Memphis
*Snythe Jr, Frank Ward, Memphis
*Snythe Jr, Frank Ward, Memphis
*Snythe Jr, Frank Ward, Memphis
*Solomico, Vincent Lee, Memphis
*Solomico, Vincent Lee, Memphis
*Spears, Hubert Earl, Memphis
*Spears, Judy, Memphis
*Spears, Judy, Memphis
*Spencer, Judy, Memphis
*Spencer, Judy, Memphis
*Spiers, Jason, Memphis
*Spiers, Jason, Memphis
*Spiers, Jason, Memphis
*Stallings, John M, Memphis
*Stallings, John M, Memphis
*Stallings, John M, Memphis
*Stanley, Trelvis L, Memphis
*Stanley, Tred, Memphis
*Stanley, Tred, Memphis
*Stevenson, Cleo Wilson, Memphis
*Stevenson, Robin Malcolm, Memphis
*Stevenson, Robin Malcolm, Memphis
*Stevenson, Robin Malcolm, Memphis
*Stevenson, Robin Malcolm, Memphis
*Stevenson, Cleo Wilson, Memphis
*Stevenson, Cleo Wilson, Memphis
*Traberg, Gary David, Memphis
*Traberg, Gary David, Memphis
*Traberg, Gary David, Memphis
*Traberg, John Challers, Memphis
*Traberg, John Challers, Memphis
*Townsen Hilliam C, Memphis
*Townsen Hilliam C, Memphis
*Townsen Hilliam C, Memphi

Treadwell III, George H, Memphis
Trev, Gary F, Memphis
Troutman, Tammy R, Knoxville
Tuberville, Audrey Whaley, Memphis
Tullis, Kenneth Frank, Memphis
Tullis, Kenneth Frank, Memphis
Turley Jr, Hubert King, Memphis
Turner, Geo Randolph, Memphis
Turner, Geo Randolph, Memphis
Turner, James E, Memphis
Turner, Janes E, Memphis
Ushaw, James Jerry, Memphis
Ushaw, Jefferson Davis, Memphis
Ushaw, Jefferson Davis, Memphis
Ushaw, Janes Jerry, Memphis
Usley, Anne Clark, Memphis
Varler, Janes Carroll, Memphis
Varner, James Carroll, Memphis
Varner, James Carroll, Memphis
Varner, James Carroll, Memphis
Varner, James Carroll, Memphis
Vernon, Michael Lee, Germantown
Vick, Sidney D, Memphis
Vernon, Michael Lee, Germantown
Vick, Sidney D, Memphis
Vernon, Michael Lee, Germantown
Vick, Sidney D, Memphis
Voeller, Guy R, Memphis
Walar, John Thorn, Memphis
Wade, Robert William, Memphis
Waker, Tr, Parks W, Memphis
Waker, Tr, Parks W, Memphis
Waker, Frances Carolyn, Memphis
Walker, John Thorns, Memphis
Walker, Frances Carolyn, Memphis
Walker, Frances Carolyn, Memphis
Waller, John Thomas, Memphis
Waller, John Thomas, Memphis
Waller, William White, Memphis
Waller, William K, Memphis
Waller, William K, Memphis
Walrer, Ty, William Charles, Memphis
Warr, Otis S, Memphis
Weber, Ben Porter, Memphis
Weber, Ben Porter, Memphis
Weber, Hos Devender, Memphis
Wili

wilson, Donald Bruce, Memphis
*wilson, James E, Memphis
wilson, James E, Memphis
wilson, John McCullough, Memphis
*wilson, John McCullough, Memphis
*wilson, John McQuiston, Memphis
wilson, Raymond Edward, Cordova
winer Muram, Helen T, Memphis
-wisniewski, Joseph M, Chattanooga
Witherington III, James B, Memphis
witherspoon Jr, Frank G, Memphis
witherspoon Jr, Frank G, Memphis
wood II, George W, Memphis
wood II, George W, Memphis
wood, Matthew W, Memphis
woodall, Charles Jackson, Memphis
woodall, Charles Jackson, Memphis
woodbury, Geo Robt, Memphis
woodbury, Linda L Plzak, Memphis
woodbury, Linda L Plzak, Memphis
*wooleld, Shannon Lee, Memphis
*woolely, Clifton Ward, Memphis
wooten, Richard Lindsey, Memphis
wortham III, George F, Memphis
wortham III, George F, Memphis
wortham III, George F, Memphis
worthington, Julian Mack, Memphis
*wrenn Jr, Earle L, Memphis
*wright, Frank D, Memphis
wright JT, Leonard D, Memphis
wright JT, Leonard D, Memphis
wright, Dana John, Memphis
wright, Sheryl Jones, Memphis
wright, Sheryl Jones, Memphis
*Wurzburg, Henry, Memphis
*Yarbrough, Robert R, Memphis
*Yarbrough, Robert R, Memphis
*Yarber, Robert H, Memphis
*Yarber, Robert H, Memphis
*Yates, Linda Kay, Cordova
Yeates, Laura, Memphis
*Young, Jean Anne, Memphis
Young, Jean Anne, Memphis
Zanella Jr, John, Memphis
Zanella Jr, John, Memphis
Zanella Jr, John, Memphis
Zanella Jr, Germantown

MONROE COUNTY MEDICAL SOCIETY

Allen, James Lester, Sweetwater
Carpenter, Douglas R, Madisonville
Evans, Thomas S, Sweetwater
Gettinger, Joshua S, Madisonville
Harvey, William L, Sweetwater
Hays, Robt Danl, Cleveland
Hyman Jr, Orren Williams, Sweetwater
Levin, Barbara Ann, Madisonville
Lowry, Frank H, Madisonville
Ness, James W, Tellico Plains
Villaneuva, Ramon, Sweetwater
Zee, Paulus, Sweetwater

MONTGOMERY COUNTY MEDICAL SOCIETY

Anderson, Paulette D, Clarksville
*Atkinson, Edward R, Clarksville
Baggett, Henry W, Clarksville
Beazley, William Cooper, Clarksville
Bellenger, James F, Clarksville
Bellenger, James F, Clarksville
Brandon, Gilbert T, Clarksville
Brandon, Gilbert T, Clarksville
Brandon, Gilbert T, Clarksville
Brandon, Gilbert T, Clarksville
Bushee III, Greer Albert, Clarksville
Bushe III, Greer Albert, Clarksville
Carrigan, Vernon M, Clarksville
Cha, Paul Sangyong, Clarksville
Cole, Herbert Rowland, Clarksville
Creekmore, Harry S, Clarksville
Creekmore, Harry S, Clarksville
Creekmore, Harry S, Clarksville
Conningham Jr, Thos M, Clarksville
Deal, Virgil T, Clarksville
Dennison, Melissa Boucher, Clarksville
boty Jr, Robert D, Chapmansboro
Durrett Jr, Dawson W, Clarksville
Farrar, James Thos, Clarksville
Farrar, James Thos, Clarksville
Ferster, Karen Pitts, Lexington, KY
Futrell, Danny W, Clarksville
Grabenstein, T G, Clarksville
Grabenstein, William P, Clarksville
Grabenstein, William P, Clarksville
Hall, Billy T, Mobile, AL
Hall, Michael Stanley, Clarksville
Hudson III, William D, Clarksville
Hudson III, William D, Clarksville
Hudson Robert W, Clarksville
Hudson Robert W, Clarksville
Kennedy, Howard R, Clarksville
Kennedy, Howard R, Clarksville
Kennedy, Howard R, Clarksville
Kennedy, Howard R, Clarksville
Koehn Jr, Robt C, Clarksville
Koenn Jr, Robt C, Clarksville
Kennedy, Howard R, Clarksville
Ledbetter, Buford B, Clarksville

Lee, Robt Henry, Dover Lemoine, Fritz F, Clarksville Lett, James C, Erin Ligon, Douglas Wister, Erin Lemoine, Fritz F, Clarksville
Lett, James C, Erin
Ligon, Douglas Wister, Erin
Limbaugh Jr, James W, Clarksville
Lind, Roger Charles, Clarksville
Lowe Jr, Reginald S, Clarksville
Luton, Oaklus Saml, Clarksville
Martin, Daniel Ernest, Erin
McCampbell, Frank G, Clarksville
Miles Jr, Jos Wm, Clarksville
Mitchum, Albert Jackson, Clarksville
Moessner, Harold F, Clarksville
Montgomery, Tony Johnson, Clarksville
Moore, W R, Clarksville
Peacher, Terry Gene, Clarksville
Peacher, Terry Gene, Clarksville
Perales, Angel U, Dickson
Peterson, Keith D, Clarksville
Porter, Douglas Dwight, Clarksville
Prine Jr, Wm Wesley, Clarksville
Resta, Bart J, Clarksville
Rice, Robin L, Clarksville
Rice, Robin L, Clarksville
Roads, Timothy R, Clarksville
Roads, Timothy R, Clarksville
Salyers, Steve G, Clarksville
Salyers, Steve G, Clarksville
Siler, Rita Anne, Clarksville
Siler, Mark A, Clarksville
Siler, Mark A, Clarksville
Siler, Mark A, Clarksville
William Morris, Clarksville
Walker, Joe R, Clarksville
Walker, Joe R, Clarksville
Walker, Joe R, Clarksville
Walker, Joe R, Clarksville
Williams, David B, Clarksville
Williams, David B, Clarksville
Williams, David B, Clarksville
Wirght Jr, John Fay, Clarksville
Winght Jr, John Fay, Clarksville

NASHVILLE ACADEMY OF MEDICINE/ DAVIDSON COUNTY MEDICAL SOCIETY

NASHVILLE ACADEMY OF MEDICINE/
DAVIDSON COUNTY MEDICAL SOCIETY

Abbott, Julie Lunsford, Nashville
Abisellan, Georgina A, Nashville
Abrams, Daniel J, Nashville
Acosta, Estrella P, Madison
Acree, Maurice Mason, Nashville
*Adams Jr, Robt Walker, Nashville
*Addms, Crawford, Duck Key, FL
Addlestone, Ronald B, Nashville
Addelson, Lori M, Nashville
Adkins, Robt Benton, Nashville
Adkins, Royce Terrell, Goodlettsville
Adkins, Thomas G, Nashville
Adkins, Thomas G, Nashville
Adkins, Judith Blevins, Nashville
Akin, Judith Blevins, Nashville
Akin, Judith Blevins, Nashville
Alexander JI, Clyde W, Nashville
Alexander, Dave A, Nashville
Alexander, Dave A, Nashville
Alford, Robert H, Nashville
Alford Jr, Wm Cutter, Nashville
Alford, Robert H, Nashville
Allen Jr, Nowton Perkins, Nashville
Allen, Varne Elwood, Nashville
Allen, Verne Elwood, Nashville
Allen, Verne Elwood, Nashville
Allen, Verne Elwood, Nashville
Allen, Verne Elwood, Nashville
Allen, Terry Reynolds, Nashville
Allen, Nashville
Aller, Robert L, Nashville
Anderson Jr, Fred, Nashville
Anderson Jr, Fred, Nashville
Anderson Jr, Sames E, Nashville
Anand, Vinita, Nashville
Anderson Jr, James F, Nashville
Anderson Jr, James F, Nashville
Anderson, Edwin B, Nashville
Anderson, Edwin B, Nashville
Anderson, HR, Nashville
Anderson, HR, Nashville
Anderson, HR, Nashville
Anderson, Wm Clyde, Nashville
Anderson, Wm Clyde, Nashville
Anderson, HR, N

Ballinger, Jeanne F, Nashville
Ban, Thomas A, Nashville
Barnets Jr, Maurice C, Nashville
Barnett, Donald R, Nashville
Barnett, Patrick A, Nashville
Barnett, Paul Harold, Nashville
Barnett, Robt Burton, Nashville
Barnett, Robt Burton, Nashville
Barnett, Robt Burton, Nashville
Barton, David, Nashville
Batalden, Paul B, Nashville
Batalden, Paul B, Nashville
Batalden, Paul B, Nashville
Batason, Randolph, Troy, AL
Baucom, William E, Nashville
Basson, Randolph, Troy, AL
Baucom, William E, Nashville
Beazley, Luthur, Nashville
Beezley, Luthur, Nashville
Beezley, Luthur, Nashville
Beeck, Chas Bernard, Madison
Beck, Larson Dale, Madison
Beck, Larson Dale, Madison
Beck, Larson Dale, Madison
Beck, Larson Dale, Madison
Bell, Robt Le Roy, Nashville
Bell Jr, Frnest Andrew, Madison
Bell, Robt Le Roy, Nashville
Bender, Richard A, Nashville
Bender, Robert Richard, Nashville
Benning, Thomas R, Nashville
Benning, Thomas R, Nashville
Benning, Tralph C, Nashville
Benning, Tralph C, Nashville
Benning, Tralph C, Nashville
Bernard, Stanley, Nashville
Berrard, Stanley, Nashville
Berrard, Stanley, Nashville
Berrard, Stanley, Nashville
Berrard, Stanley, Nashville
Berrie, Warren R, Nashville
Berrie, Warren R, Nashville
Berrie, Warren R, Nashville
Berrie, John H, Nashville
Berrie, John H, Nashville
Berrie, John H, Nashville
Besthard, Charles M, Nashville
Besthard, Charles M, Nashville
Besthard, Jr, William Joseph, Mashville
Bishop Jr, Eugene L, Nashville
Bishop Jr, Eugene L, Nashville
Bishop Jr, Eugene L, Nashville
Bishop Jr, Tugene L, Nashville
Bishop Jr, Tugene L, Nashville
Bishop, Lindsay K, Nashville
Bishop Jr, Tugene L, Nashville
Bishop, Jr, Maren R, Nashville
Bishop, Jr, Maren R, Nashville
Bishop, Jr, James D, Nashville
Bond III, John Benj, Nashville
Brannon, Cravais, Nashville
Brannon, C Travis, Nashville
Brannen, Cravais, Nashville
Brannen, Cravais,

Burnes, James Edmond, Madison
Burnett, Lonnie S, Nashville
Burr, Robert E, Hendersonville
Burr, Robert E, Hendersonville
Burrus, Roger Byron, Nashville
Burrus, Roger Byron, Nashville
Burrus, Roger Byron, Nashville
Byrd JI, Benj Amin F, Nashville
Byrd JT, Benj F, Nashville
Byrd JT, Benj F, Nashville
Caddwal JT, Benj H, Nashville
Caldwal JT, Benj H, Nashville
Callaway, James J, Nashville
Callaway, Thomas Haile, Nashville
Callaway, Thomas Haile, Nashville
Callaway, Thomas Haile, Nashville
Campbell, Susan B, Nashville
Campbell, Susan B, Nashville
Campbell, Susan B, Nashville
Campbell, Susan B, Nashville
Cannon II, Richard O, Nashville
Cannon II, Richard O, Nashville
Cannon II, Cannon II, Richard O, Nashville
Cannon II, Stephen B, Nashville
Cannon II, Stephen B, Nashville
Cannon II, Stephen B, Nashville
Carlson, Brian Richard, Mt Juliet
Carnahan, David Meal, Columbia
Carrey Jr, Sam W, Madison
Carjen, Andrew B, Nashville
Carlson, Brian Richard, Mt Juliet
Carnahan, David Meal, Columbia
Carney Jr, Sam W, Madison
Carpenter Jr, Gec Kenyon, Nashville
Carter, Jeffrey B, Nashville
Carter, Jeng M, Nashville
Carter, Jeng M, Nashville
Carter, Jeng M, Nashville
Carter, Joscan Willis, Nashville
Cate, Ronald C, Nashville
Cate, Ronald C, Nashville
Cate, Nashville
Cate, Nashville
Chands, Juli P, Nashville
Chanders, Jill F, Nashville
Cobb Jr,

Davis, Wm Gray, Madison
Day, T Wayne, Nashville
DeBell ST, William Keith, Hermitage
DeLozier III, Joseph B, Nashville
Deal, Roy W, Nashville
Deal, Roy W, Nashville
Decker, Michael Donahue, Nashville
Dewent, Samuel Houston, Nashville
Dement, Samuel Houston, Nashville
Dement, Samuel Houston, Nashville
Delvaux Jr, Thos C, Nashville
Dillard Jr, Saml Henry, Nashville
Dillard Jr, Saml Henry, Nashville
Dillard Jr, Saml Henry, Nashville
Diton, Bryce William, Nashville
Diton, Bryce William, Nashville
Dook, Wm Melville, Donelson
Dodd, Robert T, Nashville
Donnell, Mark L, Madison
Donovan, Kevin L, Nashville
Donnell, Mark L, Madison
Donovan, Kevin L, Nashville
Dopp, Alan C, Nashville
Dopp, Alan C, Nashville
Down L, Trederick Thompson, Nashville
Down L, Trederick Thompson, Nashville
Down L, Frederick Thompson, Nashville
Dowler, Haw Lee Nachmersonville
Dowler, Haw Lee Nachmersonville
Doyle, Doorah R, Nashville
Doyle, Mark Alan, Nashville
Doyle, Mark Alan, Nashville
Doyle, Mark Alan, Nashville
Dorier Jr, J Emmett, Nashville
Durier Jr, L Rowe, Nashville
Duley, B Stephens, Nashville
Duley, B Stephens, Nashville
Duley, B, Nashville
Duncan, Geo E, Nashville
Duncan, Geo Dewey, Nashville
Duncan, Geo Dewey, Nashville
Dunkerley Jr, Robt C, Nashville
Dunkerley Jr, Robt C, Nashville
Dutton, Wm Patterson, Nashville
Ebert, Michael H, Nashville
Ebert, Michael H, Nashville
Ebert, Michael Ernest, Nashville
Ebert, Michael K, Nashville
Ebert, Michael Ernest, Nashville
Edwards, Joe Michael, Nashville
Edwards, Joe Michael, Nashville
Edwards, Mm H, Nashville
Edwards, Mm H, Nashville
Elam III, Roy Oscar, Nashville
Flakla, Lise Allian, Nashville
Flakla, Lise Allian, Nashville
Flakla, Lise Allian, Nashville
Flakla, Lise Allian, Nashville
Flexer, Jahn Morris, Nashville
Flexer, John Morris, Nashville

*Foreman, Howard R, Nashville
Poster, Henry Wendell, Nashville
Poster, Nelson Ray, Franklin
Powinkle, Eugene Wesley, Nashville
*Fowler, Saml B, Nashville
Prancis, Robt Stanley, Nashville
Pranklin, Jalan J, Nashville
Pranklin, Jerry M, Nashville
Freeman, Mark Pearce, Nashville
Freeman, Mark Pearce, Nashville
Freeman, Rufus Jack, Nashville
Freeman, Rufus Jack, Nashville
Frenchman, Khushru H, Hendersonville
Frey, Walter Willis, Nashville
Frist JT, John C, Nashville
Frist JT, John C, Nashville
Frist, Thos F, Nashville
Frist, Thos F, Nashville
Frist, William Harrison, Nashville
Frist, William Harrison, Nashville
Frist, Thos F, Nashville
Frist, Mashville
Gaines, Donald Lee, Nashville
Gaines, Donald Lee, Nashville
Gaines, Donald Lee, Nashville
Garner, Chas Kurtin, Nashville
Garrett, Sam Young, Nashville
Garrett, Sam Young, Nashville
Garrett, Sam Young, Nashville
Garrett, William Edward, Hendersonville
*Caskins, Fay M, Nashville
Gavagan, Wm Mitchel, Nashville
Gav, David Wisdom, Nashville
Gav, David Wisdom, Nashville
Gav, David Wisdom, Nashville
Gav, William Richard, Nashville
Cadvigan, Wm Mitchel, Nashville
Gentile, Douglas A, Nashville
Geddie, Danl Clark, Nashville
Geddie, Danl Clark, Nashville
Geddie, Danl Clark, Nashville
Geddie, Danl Clark, Nashville
Gentile, Douglas A, Nashville
Gentile, Douglas A, Nashville
Gentile, Douglas A, Nashville
Gentile, Douglas A, Nashville
Geddie, Danl Clark, Nashville
Geddie, Danl Clark, Nashville
Geddie, Danl Clark, Nashville
Gentile, Douglas A, Nashville
Gentile, Douglas A, Nashville
Gentile, Douglas A, Nashville
Gentile, Douglas A, Nashville
Geddie, Danl Clark, Nashville
Geddie, Danl Clark, Nashville
Geddie, Danl Clark, Nashville
Geddie, Jr, Hard, Nashville
Geddie, Jr, Nashville
Gentile, Douglas, Nashville
Gentile, Jr, Francis W, Nashville
Glassoock, Michael H, Nashville
Glassford Jr, James R, Nashville
Graham, Jr, Robert P, Nashville
Grow, James D, Nashville
Grow, James D

Hagenau, Curtis James, Nashville
Halnes Jr, Chas Edgar, Nashville
Halnes Jr, Robt Leo, Madison
Hall Jr, Wallace Howard, Nashville
Halley Jr, Robt Leo, Madison
Hall Jr, Wallace Howard, Nashville
Halton, Thos Branson, Nashville
Halton, Thos Branson, Nashville
Hamburger, Norman J, Brentwood
Hamilton, James Richard, Nashville
Hammon Jr, John W, Nashville
Hammon Jr, John W, Nashville
Hammon Jr, John W, Nashville
Hammon Roy Glenn, Nashville
Hammon Roy Glenn, Nashville
Hamcock, Kenneth Charles, Nashville
Handte, Robert E, Brentwood
Hanes, Thomas Eugene, Madison
Hansen, Axel Carl, Nashville
Hardin, Robt Allen, Nashville
Hardin, Robt Allen, Nashville
Harris, Jackson, Nashville
Harris, Jackson, Nashville
Harris, Jeffrey S, Nashville
Harris, Jeffrey S, Nashville
Harris, Perry Felton, Nashville
Harris, Jeffrey S, Nashville
Harvey, Mark, Nashville
Harvey, Mark, Nashville
Harvey, Mark, Nashville
Harwell, Aubrey B, Nashville
Harwell, Aubrey B, Nashville
Hawell, Ju, Wm Beasley, Nashville
Haynes, James Hugh, Nashville
Haynes, James Hugh, Nashville
Haynes, James Tugh, Nashville
Haynes, James Hugh, Nashville
Haynes, James Hugh, Nashville
Hayne, James Hugh, Nashville
Helmen, Craig Reed, Nashville
Helin, Craig Reed, Nashville
Helder, Richard Moss, Nashville
Heldernan, J Harold, Nashville
Helder, Richard Moss, Nashville
Helder, Richard Moss, Nashville
Henderson, James Porter, Nashville
Helder, Richard Moss, Nashville
Helder, Richard Moss, Nashville
Helder, Richard Moss, Nashville
Helder, Richard Moss, Nashville
Helder, Robert William, Brentwood
Herrington Jr, John L, Nashville
Helder, Robert William, Nashville
Helder, Robert William, Nashville
Helder, John G, Nashville
Helder, Rywillis, Nashville
Helder, James B, Nashville
Henson, Alan Stuart, Madison
Hill, Washington Clark, Nashville
Helster, Ray Willis, Nashville
Heltom, Jr, George W, Nashville
Holcomb III, George W, Nashville
Holcomb III, George W, Nashville
Hollender, Marc Hale, Nashville
Hoos, Richard T, Nashville
Hoos, Richard T, Nashville
Hollender, Marc Hale, Nashville
Holen

DECEMBER, 1991 621

Jarvis, David Alan, Nashville
Jennings, Henry S, Nashville
Jornings, Gary W, Nashville
Johns Jr, James Thos, Nashville
Johns Jr, Sarla J, Nashville
Johnson, David Horton, Nashville
Johnson, David Horton, Nashville
Johnson, James Wm, Nashville
Johnson, James Wm, Nashville
Johnson, Mark Lanier, Madison
Johnson, Robt Marshall, Nashville
Johnston, Robt Marshall, Nashville
Johnston, William D, Nashville
Jones JII, Howard W, Nashville
Jones JII, Howard W, Nashville
Jones, Pruce E, Nashville
Jones, Claudia K, Nashville
Jones, David Nando, Nashville
Jones, David Scott, Nashville
Jones, David Scott, Nashville
Jones, Frank Emerson, Nashville
Jones, Frank Emerson, Nashville
Jones, Frank Emerson, Nashville
Jones, Fhilip R, Nashville
Jones, Philip R, Nashville
Jones, Philip R, Nashville
Jones, Thomas Beverly, Nashville
Jones, Thomas Beverly, Nashville
Jones, Thomas Beverly, Nashville
Kaplan, Hos Malone, Nashville
Jones, Allen B, Nashville
Jones, Allen B, Nashville
Kaplan, Herman Jacob, Nashville
Kaplan, Herman Jacob, Nashville
Kaplan, Herman Jacob, Nashville
Kaplan, Peter Robt, Nashville
Kaplan, Peter Robt, Nashville
Kaplan, Peter Robt, Nashville
Kaplan, Peter Robt, Nashville
Kemmerly, Paul Courtland, Nashville
Kemmerly, Paul Courtland, Nashville
Kemmerly, Paul Courtland, Nashville
Kemmerly, Paul Courtland, Nashville
Kemmedy, J Allen, Nashville
Kemendy, J Allen, Nashville
Kemendy, J Allen, Nashville
Kemnedy, J Allen, Nashville
Kemner III, Mm Davis, Nashville
Kemner JII, Mm Davis, Nashville
Kemner JII, Mm Davis, Nashville
Kemner JII, Mm Davis, Nashville
Kenner JII, Mm Davis, Nashville
Kilndy, George Phillip, Nashville
Kilndy, George Phillip, Nashville
Koch, Michael O, Nashville
Lamb, Roland D, N

*Linn, Robt J, Nashville
*Lipscomy, Julie Marie, Nashville
Lipscomb Jr, Albert Brant, Nashville
Lipscomb, Paul Jay, Nashville
Lipscomb, Paul Jay, Nashville
Lipscom, Paul Jay, Nashville
Lioyd, Kenneth Michael, Nashville
Lloyd, Kenneth Michael, Nashville
Long, Ruth Barron, Nashville
Long, Ruth Barron, Nashville
Long, Ruth Barron, Nashville
Long, Mr Royston, Nashville
Lovelace, Donald Ray, Nashville
Lovelace, Donald Ray, Nashville
Lovelace, Donald Ray, Nashville
Loven, Keith H, Madison
Lovvorn JT, Harold N, Nashville
Lundin, Linda S, Nashville
Lundin, Linda S, Nashville
Lundin, Linda S, Nashville
Lundin, Linda S, Nashville
Machillan Jr, Chas W, Nashville
Machillan, Robt Duncan, Nashville
Maden Jr, James Jos, Nashville
Madeline, Lee A, Nashville
Madeline, Lee A, Nashville
Madeline, Lee A, Nashville
Mapee, Michael J, Nashville
Manlar, Robt Elwood, Nashville
Manlard, Robt Elwood, Nashville
Manlard, Robt Elwood, Nashville
Manlard, Robt Elwood, Nashville
Martin, Richard B, Nashville
Martin, Robert J, Nashville
Massie, Ralph W, Nashville
Mayes, Chas Eugene, Nashville
Mayes, Chas Eugene, Nashville
Mayas, Ens Richardson, Nashville
Mayes, Chas Eugene, Nashville
Mayard, Odis Jerry, Nashville
Mayard, Odis Jerry, Nashville
McConnell, Conn M, Madison
McClellan, Robert Lazear, Mashville
McConnell, Conn M, Madison
McCracken, Robert Lazear, Nashville
McConnell, Conn M, Madison
McCracken, Robert Lazear, Nashville
McGrew, Susan Goshgarian, Nashville
McGrew, Susan Goshgarian, Nashville
McGrew, Susan Goshgarian, Nashville
McGrew, Susan Goshgarian, Nashville
McGrew, Johnell, Hendertsonville
McGrew, Johnell, Hendersonville
McMant, John Wellington, Nashville
McGrew, Johnell, Hendersonville
McMant, John Hellington, Nashville
McHell, Larya N, Nashville
McHell, High, Halpen, Nashville
Miler, John M, Nashville
Miler, John M, Nashvil

Moore, Walton Louis, Brentwood
Moran, Houston, Nashville
Moreau, Gordon A, Nashville
Moreau, Gordon A, Nashville
Morgan III, Walter McNairy, Nashville
Morgan III, Walter McNairy, Nashville
Morgan, Susan Lynn, Antioch
Moroney, David M, Nashville
Morror, Jason Drew, Nashville
Morror, Jason Drew, Nashville
Morton III, Charles E, Nashville
Moss III, Charles E, Nashville
Moss III, Charles E, Nashville
Moss III, Charles E, Nashville
Muster, James Richard, Nashville
Muyray, Jason Drew, Nashville
Muyray, Jason Drew, Nashville
Murray, Michael James, Nashville
Murray, Michael James, Nashville
Murray, Mohatel James, Nashville
Murray, Mohatel James, Nashville
Murray, Mohatel James, Johnson City
Nace, Gary Stephen, Nashville
Nace, Gary Stephen, Nashville
Nadeau, John Hugh, Nashville
Nash, James L, Nashville
Nash, James L, Nashville
Nash, James L, Nashville
Nash, James L, Nashville
Nelet III, Wallace W, Nashville
Nelet III, Wallace W, Nashville
Nemec, Dewey G, Nashville
Nemec, Dewey G, Nashville
Nemec, Dewey G, Nashville
Nebelt Jr, Thomas E, Nashville
Nesbitt Jr, Thomas E, Nashville
Nesbitt Jr, Thomas E, Nashville
Nesbitt Jr, Thomas E, Nashville
Nesbitt, Tom Edward, Nashville
Nescond III, H Clay, Nashville
Nesbitt, Tom Edward, Nashville
Nescond III, H Clay, Nashville
Norton, Chas Glenn, Nashville
Norton, Chas Glen

Pierce, Elizabeth P, Goodlettsville
Pielstoh, John B, Nashville
Pilkinton, Robt Dale, Madison
Pinto-Cisneros, Socrates, Smyrna
Piper, Sharon Marie, Nashville
Pippin, Michael S, Nashville
Poag, Kenneth Leslie, Nashville
Poag, Kenneth Leslie, Nashville
Porden III, Phillip P, Nashville
Porch III, Phillip P, Nashville
Porter III, Lester L, Nashville
Potanin, Constantine, Nashville
Potanin, Constantine, Nashville
Powers, James S, Nashville
Powers, James S, Nashville
Prakash, Andani Siddappa, Nashville
Prakash, Rudra, Brentwood
Pratt, Stephen M, Nashville
Prakash, Andani Siddappa, Nashville
Prakash, Andani Siddappa, Nashville
Prakash, Rudra, Brentwood
Pratt, Stephen M, Nashville
Prior, Hugo C, Nashville
Prior, Hugo C, Nashville
Prior, Hugo C, Nashville
Price, Jame Stephen M, Nashville
Rajashekaraiah, K, M, Nashville
Rames, James Albert, Brentwood
Ramsey, Lloyd H, Nashville
Rames, James Albert, Brentwood
Ramsey, Lloyd H, Nashville
Reddy, Churku Mohan, Nashville
Reddy, Thy Mathlen, Nashville
Reddy, Thy Mathlen, Nashville
Reddy, Thy Mathlen, Nashville
Reddy, Thy Mathlen, Nashville
Reddy, Churku Mohan, Nashville
Reddy, Churku Mohan, Nashville
Reddy, Churku Mohan, Nashville
Reddy, Churku Mohan, Nashville
Reddick, Eddie J, Nash

Sandidge, Paula Conaway, Nashville
Sandidge, Robin Elizabeth, Nashville
Sanes Jr. Gilmore M, Hendersonville
Sanes Jr. Michael Thomas, Nashville
Sarratt, Madison H, Nashville
Sarratt, Madison H, Nashville
Sator, Incoentes A, Old Hickory
Satterfield, Robert G, Donelson
Sawyers, Julia Edwards, Nashville
Sawyers, Julia Edwards, Nashville
Schatz, Mary L Pullig, Nashville
Schoattle, Timothy P, Nashville
Schoattle, Timothy P, Nashville
Schulman, Herbert J, Nashville
Schulman, Herbert J, Nashville
Schultheiss, David Earl, Nashville
Schwikert, John Robt, Nashville
Schweikert, John Robt, Nashville
Schweikert, John Robt, Nashville
Schweikert, John Robt, Nashville
Schweikert, John Robt, Nashville
Scoville Jr, George S, Nashville
Scoville Jr, George S, Nashville
Sears, Kenneth Lewis, Nashville
Seall, Chas Gordon Renni, Nashville
Seall, Chas Gordon Renni, Nashville
Sesell, Srah Hamilton, Nashville
Seswell, Robt Alvin, Nashville
Sewell, Robt Alvin, Nashville
Sewell, Robt Alvin, Nashville
Sack, Robert Bruce, Nashville
Shack, Robert Bruce, Nashville
Shack, Robert Bruce, Nashville
Sharp, Kenneth & Nashville
Sharp, Kenneth & Nashville
Sharp, Kenneth W, Nashville
Sharp, Kronneth W, Nashville
Sherida, John Alfred, Nashville
Simpson, Lucien Caldwell, Nashville
Simpson, Lucien Caldwell, Nashville
Sherida, John Alfred, Nash

Strayhorn III, Wm David, Nashville
Stricklain, George P, Nashville
Stricklin, George P, Nashville
Stroup, Steven L, Nashville
Stroup, Steven L, Nashville
Strupy, John Allen, Nashville
Strupy, John Allen, Nashville
Stumbblefield, Mark Thomas, Nashville
Stumbblefield, Mark Thomas, Nashville
Sullivan, James N, Nashville
Sunga-Guevara, Marietta, Madison
Susskind, Cynthia G, Nashville
Susman, Craig Richard, Nashville
Susman, Craig Richard, Nashville
Susskind, Cynthia G, Nashville
Susman, Craig Richard, Nashville
Susman, Craig Richard, Nashville
Susman, Craig Richard, Nashville
Susman, Craig Richard, Nashville
Susmann, Craig Richard, Nashville
Susmann, Craig Richard, Nashville
Susmann, Craig Richard, Nashville
Susmann, Carly Richard
Swanson, Brian Robert, Nashville
Swanson, Brian Robert, Nashville
Tacogue, Loyda C, Nashville
Tacogue, Robert M, Jenewood
Tannenbaum, Jerome S, Nashville
Tacogue, Richard Carly, Nashville
Tacogue, Relissa Kay, Boston, Ma
Thomas Jr, Clarence S, Nashville
Themas, Paul Ethard, Nashville
Thomas, Clarence S, Nashville
Thomas, Clarence S, Nashville
Thomas, Clarence S, Nashville
Thomas, David Dawson, Nashville
Thomas, David Dawson, Nashville
Thomas, David Dawson, Nashville
Thomson, John B, Nashville
Thomson, Harold D, Brentwood
Thompson, Julia, Goodlettsville
Thompson, William Clark, Nashville
Trouch, Kenneth Shannon, Nashville
Trouch, Kenneth Shannon, Nashville
Trouch, Kenneth Shannon, Nashville
Trouch, Robt H, Nashville
Traudyber Jr, Leslie E, Nashville
Traudyber Jr, Leslie E,

DECEMBER, 1991 623

Weindling, Steven M, Nashville
Weiss, Manuel Robert, Nashville
Werls, Chas E, Nashville
Werthaven, Jay A, Nashville
Werther, John Robert, Nashville
Westher, Balph E, Nashville
Westey, Ralph E, Nashville
Wheeler, Paul W, Nashville
Wheeler, Paul W, Nashville
Wheeler, Paul W, Nashville
Whetesell Jr, William O, Nashville
White, Houston Wayne, Nashville
White, Houston Wayne, Nashville
White, Houston Wayne, Nashville
White, Houston Wayne, Nashville
Whitfield, Jeff David, Nashville
Whitfield, Jeff David, Nashville
Whitfield, Jeff David, Nashville
Whitfield, Jeff David, Nashville
Whitworth, Pat W, Nashville
Whitworth, Thos Clayton, Nashville
Whill, Melissa A, Nashville
Williams, Tele Ewing, Nashville
Williams, Farienne M, Nashville
Williams, Adrienne M, Nashville
Williams, Lester F, Nashville
Williams, Lester F, Nashville
Williams, Lester F, Nashville
Williams, Melborne A, Nashville
Williard, Kenny F, Nashville
Willison, David Coleman, Nashville
Willson, James Phillip, Nashville
Wilson, James Phillip, Nashville
Wilson, Wennoell Winfred, Old Hickory
Winek, David K, Nashville
Winfield, Alan C, Nashville
Winterland, Anne Woeste, Franklin
*Witherspoon, Frank G, Nashville
Winterland, Anne Woeste, Franklin
*Witherspoon, Frank G, Nashville
Witthauer, Norman Everett, Nashville
Witthum, Harry, Los Angeles, CA
Wolf Jr, John Stuart, Nashville
Wolf, Bruce Lee, Nashville
Wolf, Bruce Lee, Nashville
Wood, Alastair J J, Nashville
Wood, Alastair J J, Nashville
Wood, Geo Wallace, Nashville
Wood, Geo Wallace, Nashville
Wood, Geo Wallace, Nashville
Wood, John Robt, Ocala, FL
Wooden, Mose Clarke, Nashville
Workman, Robert Jay, Nashville
Workman, Robert Jay, Nashville
Workman, Robert Jay, Nashville
Workman, Francis Hamilton, Nashville
Workman, Fobert Jay, Nashville
Worthington, William B, Nashville
Worthington, William B, Nashville
Worthington, William B, Nashville
Worthington, William B, Nashville
Worth, Eller Payne, Nashville
Wright, Doris Jacquelyn, Nashville
Yates, David Robt, Hermitage
*Ynares, Christina M, Nashville
Yates, David Robt,

NORTHWEST TENNESSEE ACADEMY OF MEDICINE

Algee Jr, Wyatt R, Dyersburg
Allison, Jack R, Dyersburg
Anderson, Charles E, Tullahoma
*Baird, Jesse P, Dyersburg
*Banks, Thos V, Dyersburg
Beale, Hobart H, Martin
Blanton III, Marvin A, Union City
Boston, Thomas E, Dyersburg
Bradberry, Sam, Union City
Brown, Bruce B, Union City
Brown, Bruce B, Union City
Butler Jr, Arden Jones, Ripley
Butler, Harold Dee, Union City
Cameron, Robt Lynn, Union City
Carr, Kenneth, Martin
Chu, Roy W, Dyersburg
Clendenin Jr, Robt E, Union City
Connell, Joseph D, Dyersburg
Cruthirds, Terry Park, Martin
David, Mary Stuart, Dyersburg
David, Walter E, Dyersburg
Dodd, Halbert B, Union City
Donowitz, Arlene, Martin
Elam, Morris Greg, Martin
Elam, Morris Greg, Martin
Fan, Sik Man, Ripley
Freeman, Gordon, Dyersburg
Gooch, Allen Christopher, Troy
Green Jr, Danl Parker, Dyersburg
Harrington, Robt Lee, Dyersburg
Harrington, Robt Lee, Dyersburg
Harrington, Robt Lee, Dyersburg
Harrins, Lee S, Dyersburg
Harrins, Lee S, Dyersburg
Harins, Mochael, Martin
Hunt, Joe, Ripley

*Inclan, Aurelio Peter, Dyersburg
James, William Alex, Union City
Jernigan, Jerry Marshall, Dyersburg
Johnson, Eloiett, Dyersburg
Jones, David D, Martin
Joyner, Johnny Barry, Dyersburg
Kkerr, Robt Thompson, Dyersburg
Kimberlin, G Danny, Paris
King, Elton Aaron, Dyersburg
Kingberlin, G Danny, Paris
King, Elton Aaron, Dyersburg
Kingboury, Edward P, Union City
Lawrence, Roy Finch, Union City
Lewis, Rodger Patrick, Union City
Lyerly, Donald Newton, Dyersburg
Maloney, Kenneth Roscoe, Dyersburg
Marsidi, Paul, Union City
Martin, Betsy Harris, Dyersburg
McIntosh, Marquerite, Dyersburg
Moore III, Fred, Dyersburg
*Moore, James Chalmers, Dyersburg
Mulay, Ramakant M, Dyersburg
Patrick, Robert G, Martin
*Phillips, Wm Leroy, Newbern
*Porter, Nathan F, Greenfield
Ragsdale, James Howard, Union City
Reaves, John Andrew, Dyersburg
Reynolds, James Ralph, Dyersburg
Robbins, Billy Gerald, Halls
Sanner, Robert F, Union City
Schleifer III, Grover F, Union City
Schleifer III, Grover F, Union City
Shore, James Wm, Martin
Smith, David Andrew, Martin
Smith, David Andrew, Martin
Smith, David Andrew, Martin
Smith, James Herman, Dyersburg
Thompson, Thos Reece, Dyersburg
Thornton Jr, W I, Dyersburg
Thornton Jr, W I, Dyersburg
Thornton Jr, W I, Dyersburg
Torres, Jose, Dyersburg
Tucker, Wm Henry, Ripley
Warner, Lynn Andrew, Dyersburg
Wolfe, James Hardy, Dyersburg
Wolfe, Joseph W, Dyersburg

OVERTON COUNTY MEDICAL SOCIETY

*Clark, Malcolm E, Livingston Clough, John R, Livingston Cox, Michael Thomas, Livingston Jones III, Albert A, Livingston Mason, Larry, Livingston Quarles Jr, Will G, Livingston *Roe, Jack Michael, Livingston Smith, C Gray, Monterey

PUTNAM COUNTY MEDICAL SOCIETY

PUTNAM COUNTY MEDICAL SOCIETY

Adams, Robert Ralph, Cookeville
*Artress, F Lynn, Cookeville
Barnard Jr, Vaughn N, Cookeville
Barnes, Sam Taylor, Cookeville
Bertram, Rhilip, Cookeville
Bertram, Philip, Cookeville
Bremer, Joyce, Cookeville
Bremer, James L, Cookeville
*Chapin, Frederick J, Cookeville
*Conce, Daniel F, Cookeville
*Coonce, Daniel F, Cookeville
Dodson, Thomas William, Baltimore, MD
Donovan, Daniel H, Cookeville
Prancis, Wm Clark, Cookeville
Francis, Wm Clark, Cookeville
Franklin, Lloyd Douglas, Cookeville
Glasgow, Samuel McPheeters, Cookeville
Goff, Katherine W, Monterey
Goryl, Stephen V, Cookeville
Gray, James C, Cookeville
Gray, James C, Cookeville
Gray, James C, Cookeville
Hall, R Glenn, Cookeville
Hollmann, Carl M, Cookeville
Hollmann, Carl M, Cookeville
Holmes, Albert K, Cookeville
Holmes, Albert K, Cookeville
Jordan III, Chas Edward, Cookeville
Jordan III, Chas Edward, Cookeville
Kiele, Jan Eric, Cookeville
Limbacher, John P, Cookeville
Limbacher, John P, Cookeville
Lowe, Stewart T, Cookeville
Lowe, Stewart T, Cookeville
*Lowe, Jere W, Cookeville
Moore Jr, John T, Algood
Moore, Lee Stuart, Cookeville
Samples, Randall Gary, Cookeville
Shaw, James William, Cookeville
Shaw, James William, Cookeville
Shaw, James William, Cookeville
Shaw, James B, Cookeville
Shaw, James B, Cookeville
Shaw, James B, Cookeville
Talmage, James B, Cookeville
Talmage, James B, Cookeville
Talmage, James B, Cookeville
Talmage, James B, Cookeville
Smith, Sullivan K, Cookeville
Talmage, James B, Cookeville
Talmage, James B, Cookeville
*Wall, Joseph W, Cookeville
*Wall, Joseph W, Cookeville
*Wall, Joseph W, Cookeville
*Wall, Joseph W, Cookeville
*Walliams, Claude M, Cookeville

Womack III, Charles T, Cookeville *Zimmerman Jr, Guy, Byrdstown

ROANE-ANDERSON COUNTY MEDICAL SOCIETY

Ahler, Albert Julian, Harriman
Allen, Janet, Oak Ridge
Barron, David Michael, Oak Ridge
Barry, Frederick James, Oak Ridge
Beard, Alice C Anderson, Kingston
*Bigelow, Robt Ramsey, Oak Ridge
Bingham, Terry M, Harriman
*Bishop, Archer W, Clinton
Block Jr, Clement H, Oak Ridge
Brown, Archer W, Clinton
Block Jr, Clement H, Oak Ridge
Brown Jr, Geron, Oak Ridge
Brown Jr, Geron, Oak Ridge
Brown Jr, Geron, Oak Ridge
Bruton Jr, Charles W, Oak Ridge
Bruton Jr, Charles W, Oak Ridge
Caldwell Jr, Thomas C, Oak Ridge
Caldwell Jr, Thomas C, Oak Ridge
Casey, Robert Beid, Oak Ridge
Casey, Robert Beid, Oak Ridge
Compton, David R, Oak Ridge
Compton, David R, Oak Ridge
Conrad, Daniel E, Oak Ridge
Conrad, Daniel E, Oak Ridge
Conrad, Daniel F, Oak Ridge
Conrad, Daniel F, Oak Ridge
Conningham, Elbert C, Harriman
*Crews, John Pearce, Oak Ridge
Cunningham, Elbert C, Harriman
*Crews, John Pearce, Oak Ridge
Eversole Jr, Earl, Oak Ridge
Eversole Jr, Earl, Oak Ridge
Eversole Jr, Earl, Oak Ridge
Fortney, T Guy, Oak Ridge
Genella Jr, Frank H, Oak Ridge
Genella Jr, Frank H, Oak Ridge
Goswitz, Flacis Andrew, Oak Ridge
Goswitz, Helen A Vodopick, Oak Ridge
Harrison, Stephen A, Oak Ridge
Harriy, James E, Oak Ridge
Harry, Oak Ridge
Headen Jr, Henry, Clinton
Heintz, Richard, Knoxville
Gillespie Sr, James Trign, Oak Ridge
Harry, James E, Oak Ridge
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Kumar, Sarbjeet Singh, Springfield
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Rudd, J Daniel, Murfreesboro
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Caten, Joseph, McMinnville
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Dennis, Robt G, Johnson City
Dennis, Robt G, Johnson City
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*Baker, Robert F, Sparta
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*Swan, John L, Lebanon
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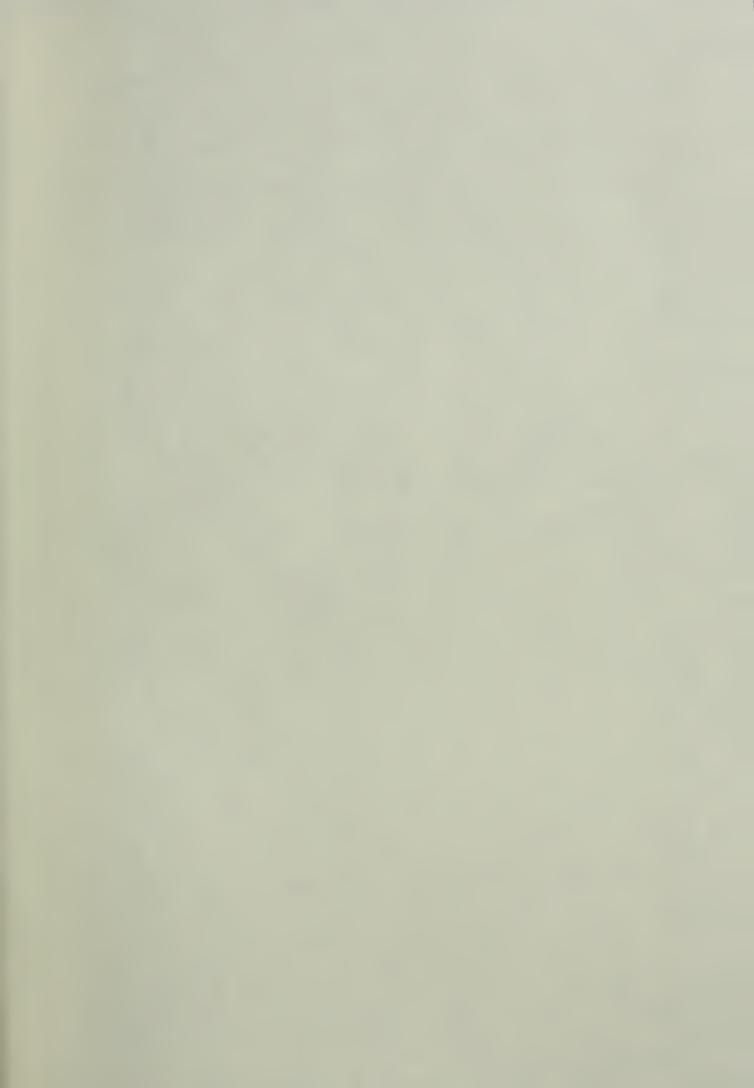
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